



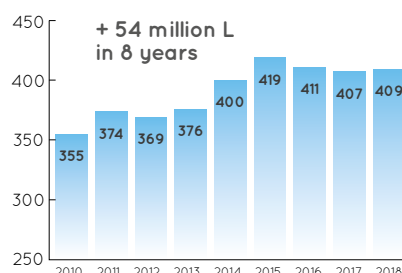
FEED  
THE PLANET  
BETTER

2018

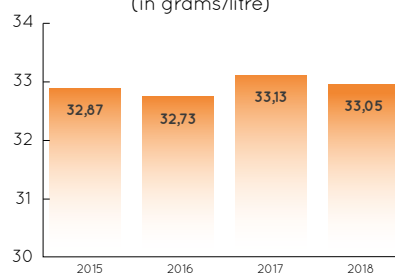
# SUPPORT THE BREEDERS

## OUR MEMBERS' MILK

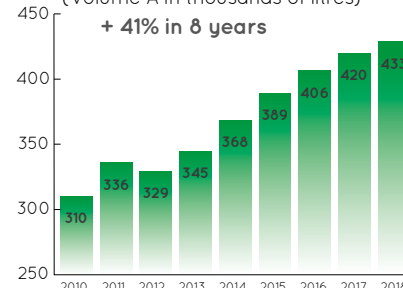
The volume collected



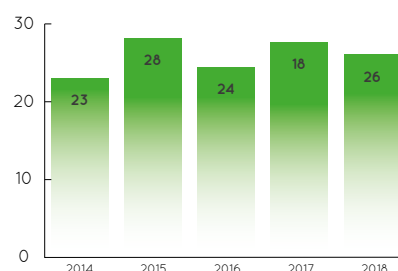
Protein material  
(in grams/litre)



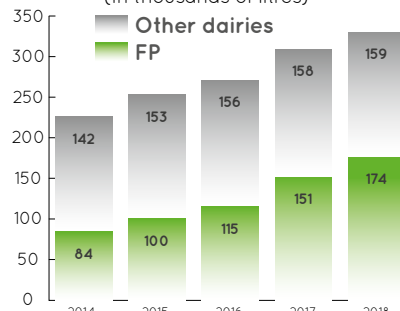
Average volume per farm  
(Volume A in thousands of litres)



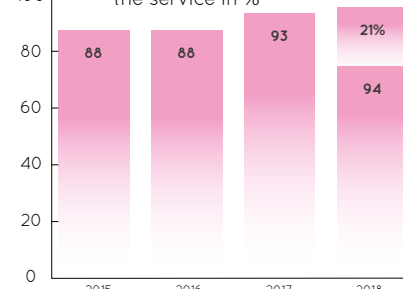
YF facilities



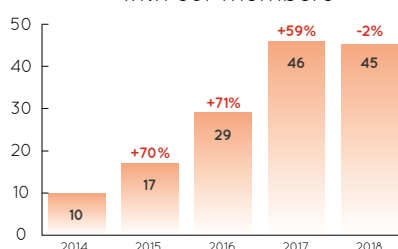
Colostrum  
(in thousands of litres)



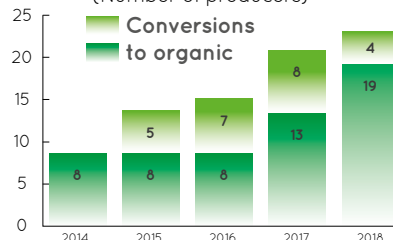
Agricultural supplies  
producers benefiting from  
the service in %



Number of days we met  
with our members



Organic milk  
(Number of producers)



# OUR ACTIONS AT SOURCE

The cumulated effect of the “quality”, “TP”, “regularity” and “Yf-bio” bonuses decided by the board of directors has made it possible to increase the average price actually paid to the Prospérité Fermière producers by over 4 €.

In 2018, the cooperative fulfilled its commitment to support the growth of farm production. Since 2011, over 100,000 additional litres are produced by collection point and paid at the A price. Even if we do not want to limit our action to that, this volume effect is not neutral for farm economies, nor for our cooperative.

## Price volatility, the new “C” volume

The introduction of a «C» volume offers members the possibility of increasing their production without penalising the collective.

New contractual arrangements have been implemented for C volume collection. At the start of the year and mid-year, producers commit to an additional volume they choose of between 2500 and 200,000 litres.

The price is not known in advance and will be determined by the valuation of powdered butter (CNIEL base using the previous month's values). This system allows producers to produce more while maximising the value of their production at market price.

## Improve performance

Faced with sharp fluctuations in input prices, farm management becomes essential, even vital, for everyone. The Groupes d'Étude et de Développement Agricole (GEDAs), partners of the Chambre d'agriculture, support farmers throughout their career.



The gross margin calculation is the milk group's flagship action and makes it possible for all farmers to compare themselves with other farmers in the region who have a similar system. The exchange with other breeders makes it possible for them to target their margins for progress and to consolidate their strong points from year to year. By joining a GEDA and groups (milk and/or crops), breeders can benefit from training, field tours, breeding tours, demonstrations. In addition to technical events, more transverse themes are also

proposed, such as how to fill in the risk assessment document, farm workforce management or learning to manage the farm better administratively in order to be as efficient as possible.

**Help for young farmers when setting up.** The installation of a young farmer is an important step in a farmer's career. Joining a GEDA allows coverage during the set up year and the possibility of individual follow-up by advisers during the first five years.

## Écolait Pilot', managing milk parlour performance

Currently being tested by our farmers, Écolait Pilot' is a technical-economic dairy farming management and decision-making tool proposed by the Bureau Technique de Promotion Laitière (BTPL).

Ecolait Pilot' is a simple and user-friendly web application that allows to control the farm's economy. This is done in two stages: monthly monitoring of milk production data and feed costs; at the end of the year, the calculation of the gross margin and the break-even price. It allows breeders to monitor their results on a monthly and yearly basis, and also to compare themselves to their local group, or to other groups (other regions or themes such as milking robots, organic, large herds...). Other interesting criteria are available such as the calculation of heifer production costs, the dairy livestock margin, the feeding system cost. Écolait Pilot' allows breeders to monitor the objectives they have set themselves taking into account volatility by separating the impact of dairy farming on technical and economic performance from cyclical impacts in the results. If the interest in Ecolait Pilot' is confirmed, Prospérité Fermière plans to facilitate the creation of a BTPL écolait group within the cooperative.





## Faba bean toasting tested by our farmers

**As part of our partnership with WWF, which in particular aims to reduce soy bean imports and seeks to supply alternative and local protein sources for dairy cows, trials were conducted by the GEDA du Boulonnais in the autumn/winter of 2017-2018.**

A defect of raw faba beans for ruminants is their PDI imbalance (Proteins Digestible in the Intestine). The level of assimilable proteins in the intestine increases using toasting and the degradability in the rumen decreases. Faba bean toasting also makes it possible to eliminate anti-nutritional factors. The equation between raw or toasted proteins has not yet been fully defined by INRA, so we must remain vigilant regarding the toasted faba bean results. The most delicate operation seems to be toasting organisation, which takes time. This consists in heating the beans to 120°C in a few dozen seconds using a fuel burner that blows air heated to 280° C (flow rate from 2 to 4t/hour). Installed on a bed behind a truck, the toaster has the advantage of being able to travel to the farms. Currently there are only three machines in France (Gers, Vendée, Grand Ouest).

Toasted faba bean has no unpleasant smells or mould and its use is similar to that of soy beans and farmers are generally satisfied with it: «The faba bean is a working product, it provides nitrogen and PDIE and is as effective as soy bean».

Toasted faba beans help to reduce production costs and its toasting cost could be further reduced in the future. It also fits perfectly into a GMO-free sector and has flawless traceability. Most of the breeders who took part in the trial are satisfied and would be interested in being part of a CUMA that would have a toaster to better spread the work over the year and further reduce costs. «Today, faba beans are equivalent to soy beans, but their advantage is that their price is not volatile, unlike soy beans,» say the farmers. The results are balanced: lower feed costs, neutral or slightly beneficial effect in milk, a slightly deteriorating effect in the protein rate.



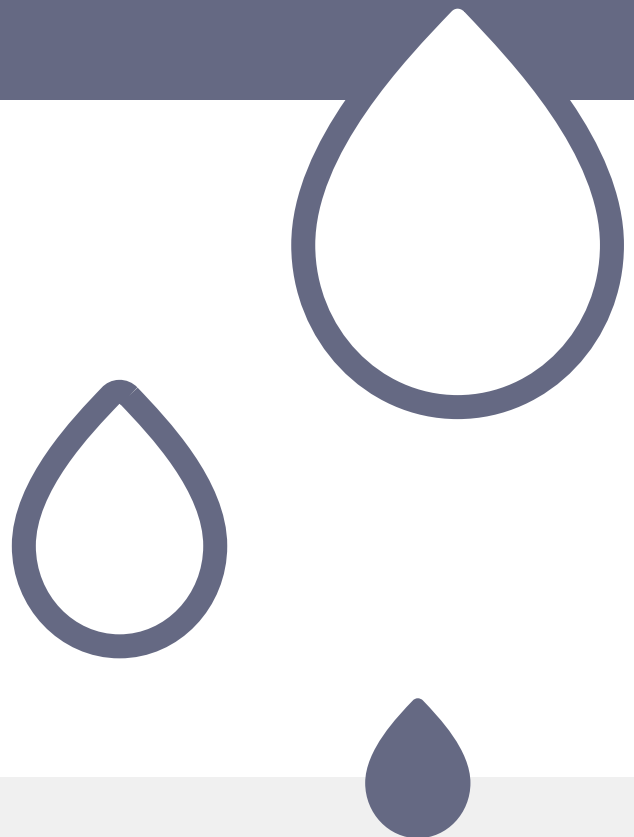
# DEVELOPING OUR CSR APPROACH, VIA LACTA

## OUR SUSTAINABLE DEVELOPMENT OBJECTIVES (SDO)

### Our sustainable development objectives

Our CSR is fully in line with the sustainable development objectives (SDOs) adopted in 2015 by all countries. These SDOs aim to find a harmonious balance between a social floor and an ecological ceiling. There are 17 such SDOs.

Our CSR is in line with six SDOs. For each selected SDO, we have selected an indicator to measure our environmental, social and societal footprint. For each indicator, we are transparent about the results and indicate our medium-term objectives.



#### Good health and well-being

Indicator: Workplace accidents



#### Clean water and waste water

Indicator: Water consumption



#### Clean and affordable energy

Indicator: Renewable energy %



#### Responsible consumption and production

Indicator: Waste recycling



#### Measures to combat climate change

Indicator: annual greenhouse gas emissions

# HIGHLIGHTS OF 2018

  
Business  
development in  
**2018**



WITH THE WATER AGENCY  
growth in organic collection of:

**54 %**

Start of organic  
goat's milk collection



PROSPÉRITÉ  
FERMIÈRE INGREDIA

uses very high quality procedures  
and has demonstrated its desire  
to respect nature

LACTIUM  
TO MANAGE STRESS  
AND IMPROVE SLEEP

Lactium

OVER **4,5** TONNES  
OF PAPER COLLECTED

Or a carbon emission saving of  
**1363 Kg**

SUPPORT  
BREEDERS  
TOWARDS THE USE OF LOCAL  
ALTERNATIVES

to imported GMO soy beans

IMPROVE THE LEVEL  
of protein and save  
energy



WELFARM PARTNERSHIP

Change practises in favour of  
animal welfare



OXYGEN PARTNERSHIP

Become aware of climate  
issues



WWF PARTNERSHIP

Commit to "sustainable food  
systems"

RELEASE  
OF A THOUSAND BROWN  
TROUT IN THE TERNOISE

2018



**CSR,**

a major challenge that we take up passionately

**8**

COMMISSIONS, 56 INTERDISCIPLINARY MEETINGS IN 2018

A proactive force for all business aspects



**CAP'JEUNES**

An extra 20€ on the first hundred thousand litres over 5 years and setting up aid of 4,000€



**73 500**

Prospérité Via Lacta milk bottles purchased by 330 employees and members.

**20 %** OF OUR BREEDERS ARE OVER

**55 YEARS OLD**

Given the age pyramid. The cooperative has decided to focus on transfers

Drop of **65 %** of consumption of imported soy beans on Via Lacta farms



Maintain at least

**750 HA OF PASTURE**

for Via Lacta farmers

**ALLINPEP**

Launch of a mixed research unit specialised in dairy peptides

LAUNCH OF  
**VOLUME C**



# RESEARCHING AND CULTIVATING THE NATURAL VALUES OF MILK





## Prioritising industrial control

To remain at the forefront of the separation of milk constituents, PF / Ingredia has launched an intensive research programme that could lead to breakthrough innovations.

Ingredia's industrial approach is supported by an industrial development unit, with investments in state-of-the-art technological equipment. It is now organised into two centres: functional milk proteins and biological protein processing. Support functions have been strengthened.



## Agri-supply, energy savings

Preferring use over ownership, the cooperative offers 50 pre-coolers with an advantageous rental contract. The tube pre-coolers are already available for sale as part of the cooperative's agricultural supply service.

La Prospérité Fermière, as an organised farmer's collective, responded to a regional/European request for proposals (PCAE/FEADER) and obtained a major 60% grant. It now offers a double option: a shared subsidy, a hire-purchase at a very advantageous rate: 35 € per month and, after 4 years [48 monthly payments], the possibility for the member to activate a 1€ purchase option.





## Agri-innovation days

The agri-innovation meetings took place over two days, with the main agricultural suppliers taking part. On the agenda: demonstrations of innovating disinfection equipment, technical feeding advice as a response to the protein level challenge (improvement of our members' mean milk protein level), or information on hygiene and waste recycling.



*"Discussion on agricultural supply good practices"*

### Via Lacta grass-fed milk meets the following criteria:

- The cows must be fed with grass that is GMO-free
- The cows must have a minimum pasture surface area of 15 ares per cow and 30 ares of grass surface area per cow
- Cows must graze 170 days per year
- The cows must be raised on straw in buildings



## Non-denaturing production process

Our centres of expertise are based on high-tech separation methods that make the most of milk constituents in their native form and retain their properties and benefits.



## Via Lacta grass-fed milk starts being marketed

Born from the meeting of our milk differentiation strategy and our CSR policy, Via Lacta grass-fed milk meets three criteria: animal welfare, the expectations of our customers and consumers, and producer earnings.

After a transitional period of six months needed to qualify for the «milk from cows fed without GMOs» criterion, the marketing of Via Lacta grass-fed milk began with, as its main outlets, UHT milk under the Prospérité brand and ingredients (milk powders and proteins). To date, we have 94 Via Lacta members for an annual production of 32 million litres of milk in 2018. The remuneration of Via Lacta grass-fed milk producers is the «volume A price» plus 15 € / 1,000 l with a minimum price of 300 € / 1,000 l.

In parallel to our three-year partnership with WWF signed in March 2017, a new collaboration with WELFARM will lead us to carry out animal welfare diagnoses amongst our Via Lacta farmers. This is in order to move forward together to meet the expectations of consumers and our customers.





## Interview with **Mathieu Carbonnet**

*Young farmer  
from the «GAEC CARBONNET» family farm  
in Magnicourt sur Canche*



### **Did the cooperative help you as a young farmer?**

I received support from the dairy. This consisted of regular training, but also financial support to complement European funding. Similarly, the cooperative organises exchanges between farmers, including abroad. So we will be travelling to Ireland to look at other farming methods.

### **You registered for the Via Lacta system when it launched, why?**

We did this with my father because it seemed very important to us. Thanks to it, we benefit from a better price for our production, but above all, it allows us to show, especially the general public, that we take great care of our animals and that we produce quality milk. It is a quality label, needed to change our image.

“

**Via Lacta shows  
that we take great care  
of our animals.**

”

### **Do you think the image of dairy farmers with the general public needs to be improved?**

Indeed, “veganism» and criticism of farmers are the trend. But in France, unlike other large agricultural countries such as the United States, Brazil and even Germany where there are many herds of 1000 cows, the farms are smaller. In the region, herds are on average 50 cows. They go out, they sleep on straw in the stables and we take great care of them. This job is seven days a week, you have to be passionate to do it. The Via Lacta approach, which has precise specifications concerning animal welfare and feed, makes it possible for us to prove our commitment. This type of approach is increasingly being promoted by the major brands that distribute milk. It is essential to inform the general public and to give a positive image of the farms.



## Organic goat's milk in the Hauts-de-France region

Prospérité Fermière and Eurial have signed a contract for the sale of organic goat's milk.

«Goat's milk is being collected in the Nord-Pas-de-Calais region for the first time. We are now selling organic goat's milk as a result of the commitment of four of our members,» said Samuel Bar, Chairman of Prospérité Fermière. This goat's milk will be processed into cheese and ultra-fresh products, such as yoghurts, by Eurial's goat subsidiary in Belgium. «For Eurial, this partnership is an opportunity to meet the growing demand for organic goat's milk with more regular deliveries thanks to the region's climate. In the long term, we plan to use Ingredia's state-of-the-art technology to develop goat's milk-based ingredients, such as powders and proteins that we do not produce,» explains Olivier Athimon, Eurial's CEO. With this contract, Prospérité Fermière guarantees its members stable outlets and revenues.

## Organic goat's milk, an opportunity for differentiation

Producing organic goat's milk is an opportunity that Prospérité Fermière offers to its members. The cooperation agreement with the Agrial group opens up real opportunities for differentiation.

In 2017, some breeders in the Boulogne area, discouraged by the surplus crises affecting the cow's milk market, expressed their wish to develop a goat workshop.

On their initiative, contacts were made with the Capra dairy in Belgium. This cheese dairy belongs to the AGRIAL group, of which the head office is located in Nantes, and of which the subsidiary Eurial is the spearhead of goat cheese production with its Soignon brand. Similarly to what it started in Brittany about ten years ago, AGRIAL wants to develop organic goat production in the North region, where rainfall and climate seem favourable to summer forage production.

Goat's milk collection began in April 2018. For the time being, two delivery agents are operational and a third will be operational before the end of the year. All three are in the conversion period and receive a support aid of 40€/per 1000 litres. When producers have the organic label, the premium will amount to 180€/per thousand litres.

The price grid for 2018 shows that the organic goat's milk market is benefiting from strong national demand for this type of product. Innovation is strong and the introduction of goat's cheese into Snacking familiarises young consumers with these new tastes.



*Signing of the partnership with Eurial*

## Organic cow's milk, a growing market

In 2018, we collected 4,111,944 litres, an increase of 54.43% compared to 2017, for an average quality that also increased from 81.6% in 2017 to 86.4% in 2018.

The average price paid, including all bonuses, for all qualities combined, was 473.26€/1000L in 2018 compared to 455.30€/1000 L in 2017, representing a good 3.95% increase. We have 19 organic producers and 4 in the conversion process with a target of 50 producers in 2025. Organic milk is a very dynamic sector that contributes to the Group's success.

## Develop the collection of organic cow's milk

Organic milk producers, or those in the process of conversion, were invited to an information meeting in Colembert where they were able to express their opinions on the evolution of organic collection at the cooperative.

The current volume of Prospérité Fermière organic milk collection, whether deposited or not, in St Pol is 4,443,000 litres from 15 members. From 2020, the additional volume, taking into account the end of conversion periods, will be 2,120,000 litres from 8 additional members. In total for 2020, there would be 23 farms for about 6,500,000 litres. Currently, we process 9.5 million litres, including 2 million litres of NOP at the St Pol site. By 2020 we expect a total need for organic milk at St Pol of 11 million litres, including 2 million litres in NOP. The objective is to collect 10 million litres within 5 years.





## Colostrum, a consistently strong demand

In 2018, colostrum collection amounted to a total volume of 334 kl, an increase of 8.15% compared to 2017.

This year's objective was to consolidate the development of volumes by rewarding the first 100 litres by a 300€ lump sum.

The number of producers stopping colostrum deliveries (40) was offset by the arrival of new ones (75) to reach 1,053 colostrum suppliers for all dairies, compared to 1018 in 2017. Prospérité Fermière producers represent 49% of all colostrum suppliers. New collection centres have been opened in the North at Meteren and Genech.

The year-end stock in 1st milking reaches 28.5 kl but still remains very low to meet commercial demand. The stock of 2nd milking, which reached 19 kl at the end of the year, also remains at a very worrying level to meet our customers' needs. Our commercial demand is still growing worldwide.

## BOVINE COLOSTRUM

### a dairy income supplement

Colostrum, a flagship product in ingredia's Prodiel colostrum health range, is now used by many customers in France and abroad, in Europe, Asia and the United States.

#### In human nutrition

Dietary supplements, functional foods and beverages (sports drinks) and infant nutrition.

#### In animal nutrition

Livestock or pet foods (dry and wet foods),  
Animal care.



**PRODIET COLOSTRUM  
USED BY MANY  
CUSTOMERS**



# GUARANTEERING THE FULFILMENT OF PARTNERS



## Joint Committee March 2018

### Cooperative operation at the centre of the discussions

The delegates worked on Prospérité Fermière's strengths and areas for improvement. They prepared the questions for the annual general meeting round table.

#### « Not enough room for manoeuvre »

In a hyper-competitive and hyper-standardised context that is a constraint for companies, the question asked by delegates refers, both at each member level and at the cooperative level, to what we can act on to win back economic margins and more broadly, margins for manoeuvre.

#### « Us and you »

We are the cooperative!

The « intermediate » size of Prospérité Fermière should allow for a better inter-knowledge, a more direct participation and should facilitate the expression of the « us ».

At the end of the lunch, participants were divided into four groups to reflect on three questions:

- What do you expect from your cooperative today?

- What are the strengths of your cooperative?
- What improvements would you make to the way the cooperative is currently run?

On the strengths of Prospérité Fermière, the delegates noted the regional and «human» dimension which favours listening to members, the excellent industrial tool, the opportunity for members to diversify, the contact with upstream services, the Cap Jeunes programme.

On expectations, the points raised were communication and more transparency regarding contracts and valuations as well as the cooperative's strategy, the trust to be rebuilt between directors, management and members, the member/employee relationship, the development of partnerships.



*Governance, transparency and trust*

## The Board of director committees cover all themes

Bringing together employees and Directors, the working committees of the Board of Directors generate proposals for the activities and operation of the cooperative group, while balancing the best interests both upstream and downstream.

Every year, after the annual general meeting, the Board of directors defines the composition of each working commission for the following year. There were eight in 2018. These bodies are not decision-making bodies and all their proposals must be subsequently approved by the Board. In addition to this, a joint committee meets three times a year, with each meeting dealing with a different theme related to our cooperative development strategy. 56 meetings were held in 2018, a proactive asset on all business aspects. This governance body offers a place for delegates in the life of the cooperative.



**1 • COMMUNICATION COMMITTEE:** Define communication to members and to employees

**2 • OUTH COMMITTEE- INSTALLATION AND TRANSFER:** Supporting installed young farmers as is defined in Cap'Jeunes, and preparing transfers

**3 • VOLUMES COMMITTEE:** Review each member request for additional volumes

**4 • FINANCIAL AUDIT COMMITTEE:** Improve financial communication for greater transparency and trust

**5 • OXYGEN COMMITTEE:** Find innovating and emergency solutions for members in order to face the crisis

**6 • CSR COMMITTEE:** Follow the Societal and Environmental road map drawn up in September 2015. Develop partnerships / Be proactive in terms of CSR / Monitor the five indicators

**7 • DIFFERENTIATED MILK COMMITTEE:** Labelled organic milk, Via Lacta grass-fed milk, Colostrum

**8. STRATEGY MONITORING COMMITTEE:** Carry on the differentiation strategy road map





## Cap'Jeunes

As part of the Cap'Jeunes programme, young members made a study trip to the Netherlands. The participants discovered Dutch dairy farming, which is characterised by a highly intensified production, up to 40 thousand litres of milk per hectare!

To achieve these results the farmers have focused on specialisation. Crops are delegated to agricultural contractors. The strategy is based on three fundamental principles: «the numbers, the numbers and the numbers.»





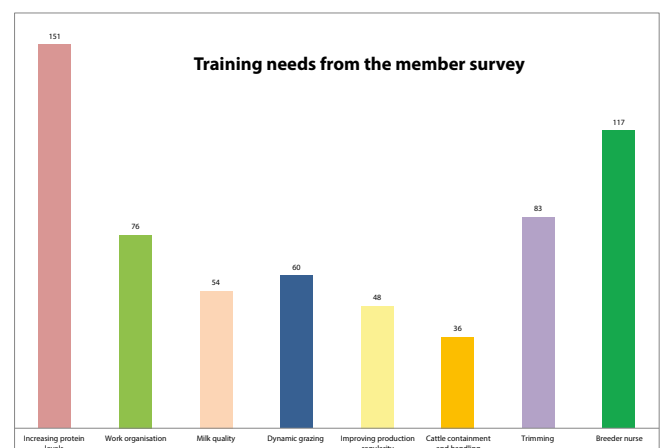
## Bovine Containment, handling safely

### Did you know?

Animal handling represents nearly 35% of accidents on farms. Their origin is most often due to unsuitable installations or inappropriate behaviour, particularly during treatments. This is why, this year, a new training course has been added to the CAP JEUNES scheme: cattle handling and containment.

#### « You have to think bovine! »

The morning was reserved for the theory on bovine knowledge. Taking into account animal behaviour and a quality human-animal relationship makes it possible to handle animals in good conditions for both workers and cattle. In the afternoon, the participants were able to put the different approach techniques into practise. The equipment used is simple and accessible to everyone: ropes and a stick.



## Preparing to transfer the farm

In Saint Pol, members took part in a day covering transfers in order to have an open discussion on this sensitive subject: the formalities to anticipate, how to assess the value of a farm, the future of the milk parlour, family equity in the transfer or the tools to find a purchaser.

Over 20 % of our breeders are over 55 years old. Considering the age pyramid, the cooperative has decided to invest in transfer issues: the future of our tool is linked to maintaining a dairy dynamic. La Prospérité Fermière is one of the partners of the Transfer Information Point (PAIT) of the Chamber of Agriculture, CEDAPAS and SAFER. On this subject, since early 2016, an "Installation - Transfer" commission was formalised and several information days proposed to future transferers.

## Members

*" Over 20 % of farmers are over 55 years old "*



*Succession classes at the St Pol plant*



## Investment

*" A global trend that impacts production and consumption "*

### Call for crowd funding

La Prospérité Fermière organises a crowd funding operation to highlight the innovative flare of its members. Operators are invited to advertise their innovative projects to gain support for their efforts.

In line with Prospérité Fermière's values, crowd funding is a trend that is part of a more global movement: collaborative consumption and participative production.

### The six factors for a successful farm transfer:

- A fair price, suitable financing and equity
- Effective and targeted support
- The will of the transferor
- Keeping the farm in good condition for transfers
- Shared human values between the vendor and the purchaser
- Transfer of know-how and the integration of the purchaser

## Support

*" To keep farms and dynamic activity in the rural environment "*

### Arcade subsidy

Arcade 59/62 is a non-profit serving farmers in difficulty which has been working to support farms and dynamic activities in rural areas since 1992. La Prospérité Fermière has been supporting this non-profit and its actions since 2012 by means of an annual subsidy.



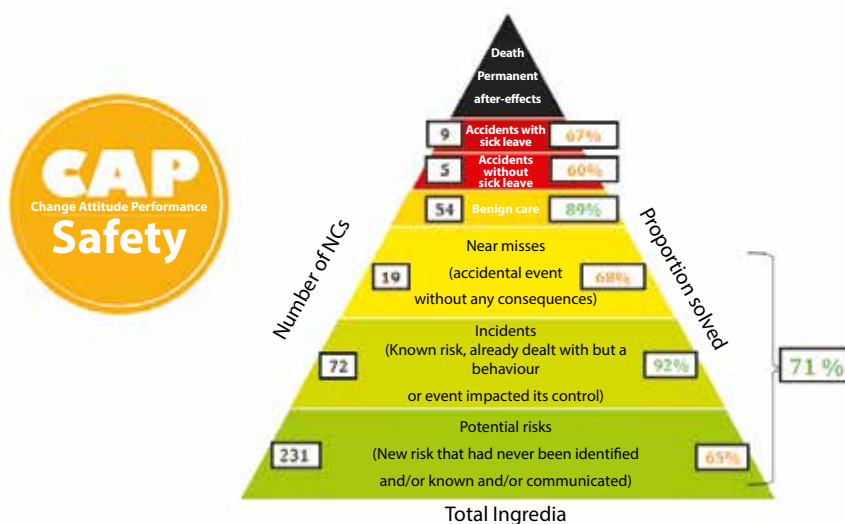
## Safety: prevention is better

### The employees have potential risk reporting forms.

Engaged in a risk reduction process and maximum prevention of workplace accidents, Prospérité Fermière uses a proven communication tool: the “Bird” risk pyramid. This is a symbolic representation of the statistical distribution of risk situations and accidents.

In the field, this results in “potential risk reporting forms” available to employees. They can, at any time, use them to quickly inform their management of possible risks found in the context of their work. In 2018, the rate of potential risk reports by employees increased by 34%. In total, we recorded a significant drop in overall accidents of 24%, and a 44% decrease in accidents with sick leave.

## Safety, I apply and get involved



“ An effective visual policy to fight accidents ”

## INTERNAL DEVELOPMENTS

In 2018, 31 employees were given internal promotions and 5 temp agency staff were hired.

Training investment focused on knowledge development and professional risk prevention at the personal and collective levels:

- ✓ Gesture and Posture training adapted to the industrial site activity (31 people)
- ✓ Creation of an induction and training seminar for new arrivals (19 employees)
- ✓ Overhaul of the Quality and Hygiene Training module (7 managers)
- ✓ Training of new project managers (11 employees)
- ✓ Personalised support for Proximity Managers, PMOs, MP/AC Managers, Department directors
- ✓ Training in communication and team leadership for Coordinators
- ✓ Development of a post-apprenticeship gateway from production to R&D

## SANDWICH CONTRACTS

The continuance of our apprenticeship policy with 15 youngsters with sandwich contracts and the hire of two youngsters with open ended contracts on completion of their training. New tutors appointed, trained and supported!

## Local initiatives for a global reach

Ingredia supports the Louvre-Lens:  
Support for regional cultural influence  
Supporting member of le Louvre-Lens



## DONATIONS-SOLIDARITY



Donations to Restos du Cœur  
were of  
**22 700**  
Litres of milk for 2018

## Employee solidarity: leave donations

created in 2015, the solidarity fund made it possible for two employees to benefit from the scheme. The company supplements each donation from an employee by 20%.

Leave donations, of a maximum of five days, are anonymous and permanent. The days in question must be transferable: RTT, rest periods, disturbing factors, days allocated to a time savings account, recovery hours, paid leave beyond the first 24 days.

## Handicap, the invested view of our company!

Disability is still a very subjective concept today, often with wrongly negative connotations.

We systematically have the vision of a person in a wheelchair, whereas in reality the notion of disability covers a very wide range of situations, as long as there is a limitation of activity or a restriction of the participation in society. For several years now, our company has been taking steps to support people with disabilities (MDPH recognition, agreement, adaptation of workstations, etc.). This is done not only with our employees, but also by outsourcing activities to organisations that employ people with disabilities. As a result, in 2017, we reached 6% of the total workforce, a dynamic that we are maintaining in order to exceed this threshold. Our aim is to contribute to keeping disabled people in employment, by promoting a change in our own perception of disability and by giving priority to «living together».



Pallets of milk for the Banque populaire du Pas-de-Calais

Fruit and vegetables for the St-Pol canteen.  
The fresh fruit and vegetables from ESAT St Michel have arrived at the canteen!

They are produced locally!





## All for Romain!

**Dorianne created the association « Un pour tous, Tous pour Romain » to finance equipment to make Romain's life easier at the Ostreville school.**

On June 24th a big motorcycle race was held to launch this great initiative, the opportunity to see that Ingredia has many bikers with a big heart and that team spirit is one of our values!

For the 2nd consecutive year, Prospérité Fermière / Ingredia participated in the 35th edition of the Arras walking races. As part of the corporate challenge that rewarded those with the highest number of arrivals in all the events, Prospérité Fermière / Ingredia took 2nd place on the podium and won €100 in equipment vouchers. We gave this card to Dorianne to kit out Romain for the new school year.



## Prospérité Fermière/Ingredia victorious in the 2018 agricultural cooperative half-marathon

Over 70 French cooperatives and over 1000 runners participate in the cooperative half-marathon. All our runners finished their 10 km run or their half marathon!

32 employees from la Prospérité Fermière/Ingredia took part in the agricultural cooperative race organised by Axereal on Saturday, September 22, 2018 in Olivet.

Besides their very good performance, this sports trip made it possible to create very strong links between Arras and St Pol employees: knowledge, professional exchanges, laughter and good humour!





# PROTECT THE SUSTAINABILITY OF THE PLANET



## A common strategy with WWF France on future developments to better respect the ecosystem

The purpose of the road map drawn up with our partner WWF France is to set up indicators to monitor and continuously improve the Via Lacta programme relative to the sustainability of the dairy activity and the reduction of its environmental impacts. Our commitment is to reduce the consumption of imported soy bean by 65% in the farms that take part in our Via Lacta policy, by finding alternative proteins. To achieve this, we would like to include 150 tonnes of toasted faba beans in rations by the end of 2018, all locally supplied.

By 2020, the objective is to reduce soy bean consumption by 90 % through the financing of faba bean toasting projects with local agricultural players. The drop in soy bean imports would make it possible, amongst other things, to approach the targets France committed to at COP 21: a reduction of greenhouse gas emissions by 40 % by 2030. This undertaking goes further: we want to keep at least 750 ha of pasture, which is the equivalent of storing 52,500 tonnes of CO<sub>2</sub> equivalent.

Important stakes, as one hectare of pasture stores 70 tonnes of carbon, as much as a hectare of forest. Since 1970, 30 % of all permanent pasture has disappeared in France. In parallel, the collection of eco-responsible Via Lacta milk, which was launched in April 2017 by certain Prospérité Fermière producers, is currently materialised by the launch of the first products in this range: ingredients for agri-food and nutrition professionals, and "Prospérité" drinking milk for the general public.

## A shared will with WWF France, the will to support the change of civil society

This is why in March 2017, Prospérité Fermière/ Ingredia chose WWF France to assist it in identifying environmental issues and selecting the actions to be implemented. As an internationally recognized NGO, WWF France contributes its scientific methodology and consultation approach to fully integrate the work of Prospérité Fermière/ Ingredia.

## How to improve biodiversity?

### Raise awareness of and better understand the local context

- The aim is to better understand the conservation objectives and the vulnerability of the ecosystem in order to adapt practices effectively

### Maintain agri-ecological infrastructure

- Maintain hedges, tree lines or groves to promote habitat diversity and allow for better carbon storage and pest management

### Adapt livestock density

### Reduce pasture fertilisation

- Maintain a dense plant cover all year round to benefit from ecosystemic services that preserve water quality and manage erosion risk
- Reduce mineral fertilisation as much as possible and adjust livestock density (and therefore organic fertilisation) to the plot context and the conservation objectives
- Potential decreases in forage quantities must be considered in relation to a potential improvement in forage quality (more legumes and therefore more protein content)

### Adapt mowing dates (by best adapting forage quantity and quality)

- Reduce mowing equipment speed (especially where birds are present)
- Avoid mowing at night
- Mow from the inside towards the edges
- Postpone mowing depending on bird breeding cycles
- Use rotational mowing

## Respect the ecosystem more

As part of the partnership with WWF, Prospérité Fermière undertook to reduce soy bean imports, seeking local protein supplies for dairy cow rations and maintaining pastures. This is an overview of the actions carried out on these commitments in 2018:

- 3600 tonnes of soy beans were replaced by 5400 tonnes of rapeseed;
- 4 members participated in a trial on the use of toasted faba beans which made it possible to validate that the partial substitution of rapeseed by faba beans was realistic;
- 750 ha of pasture were maintained;
- the collection of Via Lacta grass-fed milk has progressed with the individual increase in the production of those who are members of the scheme.





Interview with  
**Lucie Smith**

*In charge of relations  
with the Economic World at WWF France*



**The partnership set up with La Prospérité Fermière / Ingredia a year and a half ago is now halfway through its term. Could you make a first assessment?**

As part of this partnership, we made a critical review of the Via Lacta charter sustainability criteria, particularly with regards to dairy cow feed and grazing practices. However, the partnership goes beyond Via Lacta as Prospérité Fermière/Ingredia has also joined a WWF multi-company work group for the fight against converting natural ecosystems to soy bean crops. This initiative, launched in October 2018, unites several French soy bean supply chain players (distributors, processors, etc.) around a common objective: to identify the most appropriate actions per sector in order to achieve zero conversion supply chains. Finally, La Prospérité Fermière / Ingredia's dairy advisers are currently working on topics promoted by WWF, such as the conversion to organic farming or the protection of biodiversity on a dairy farm. This work, of which the objective is to translate nature protection to the dairy farm scale, makes it possible to identify the obstacles and levers that farmers face when implementing new practices.

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**Our partnership aims to change practices throughout the milk value chain.**

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**What are the areas for improvement for this partnership?**

The partnership main challenge is to increase the number of dairy farms in La Prospérité Fermière that join the Via Lacta scheme, since it currently covers only 10% of farmers. Farmer awareness-raising actions in this regard are ongoing, but we consider that this is not enough: downstream work is also needed. This is why WWF also works with Ingredia's clients to present and promote Via Lacta. We believe that Ingredia's major accounts should prefer the most virtuous approaches to sustainability and give them a commercial value. More market opportunities for farmers will follow.

**Is the inclusion of CSR policies in the sustainable development objectives (SDOs) advocated by the United Nations likely to accelerate this awareness?**

It is important for companies to appropriate these objectives, which constitute a global consensus. La Prospérité Fermière/Ingredia wants to act as a precursor through its Via Lacta scheme by combining it with the UN principles of responsible production and consumption. The partnership with WWF is a step in this direction as it aims to change practices throughout the milk value chain and considers farmers to be at the heart of the integration of sustainable practices.



## Oxygen breeding advice

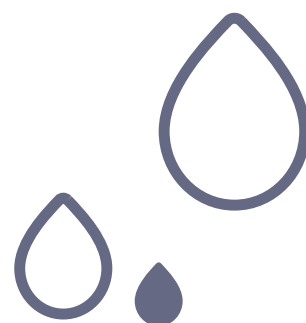
Technical  
training

CAP2R level 2



Technical  
and economic  
analyses

Project  
support



## Feeding animals without GMOs is possible

GMO-free, in the same way as animal welfare, is part of consumer expectations. Oxygen Conseil Elevage organised a meeting on GMO-free feed, in partnership with Prospérité Fermière.

The share of milk from animals fed without GMOs is increasing in France and now stands at 12% of the market milk (compared to 42% in Germany). There are different ways to give dairy cows GMO-free feed. GMO soy bean meal can be replaced by non-GMO soy bean meal or by rapeseed meal at a level of 1.5 kg of rapeseed per 1 kg of soy bean. High protein beans (faba, lupin, pea) can also be used, preferably toasted in order to rebalance their nitrogen values.

Some of the protein can also come from fodder. Increasing the pasture surface area is possible in some cases if competition with cash crops remains moderate, but in most cases better use of the pasture areas already in place will be needed in order to graze and harvest good quality grass.



Case study, the GAEC Carbonnet in Magnicourt sur Canche, Via Lacta since April 2017

GAEC Carbonnet in Magnicourt sur Canche, which has been part of the Via Lacta scheme since April 2017, has been feeding its 94 dairy cows a ration based on a mixture of corn silage supplemented with fodder beet, spent brewery grain and rapeseed meal for over 10 years. The ration cost is controlled at 102 €/1000 litres, below the local average, with production performances from 9300 kg to 37.4 g/kg of BR and 32.2 g/kg of PR. Recently, animal management in two batches depending on their lactation phase has been implemented in order to further optimise feed costs.



## Interview with **Maxime Capet**

*Manager  
of Oxygen's technical centre.*



### **What are Oxygen's main missions?**

Since last year we organised ourselves into a union of cooperatives that has joined the Seenergi group, a leader in services to breeders. Our aim is to offer farmers relevant tools and resources to continuously improve the technical performance and economic profitability of farms. We carry out expertise and consulting missions in order to support breeders in a quality approach. Amongst the subjects on which we are particularly active is animal nutrition. We make farmers aware of the need to reduce antibiotic use and show them that there are alternatives such as natural medicine. We also advise them on robotisation or the reduction of greenhouse gas emissions.

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**Breeders have become well aware of the climate challenges and of their ability to act to reduce their emissions.**

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### **You recently entered into a partnership with La Prospérité Fermière / Ingredia, what are its terms?**

We have a shared vision on many subjects such as milk quality, the possibility of feeding animals without the use of GMOs or the reduction of greenhouse gases and we want to set up a common communication. We therefore intervene on some of these subjects with the Prospérité Fermière breeders. We make them aware of the impacts of antibiotic use. We also carry out technical diagnoses on carbon dioxide emissions on farms.

### **Are livestock farmers sensitive to global warming issues?**

Breeders have become well aware of the climate challenges and of their ability to act to reduce their emissions. There are several programmes in the region on this theme.

### **Does the communication on the dairy sector also concern the general public?**

For the moment, we are focusing on farmers, but then we plan to work to improve the dairy sector image with the general public by being present at local events, for example.



## New partnership with WELFARM and a common commitment to animal welfare.

In October 2018, Prospérité Fermière/Ingredia and WELFARM, a non-profit working to improve farm animal protection at all stages of their lives, joined forces for at least two years. Their objective is to change the animal welfare practices of farmers. This partnership is structured around two key phases:

- animal welfare diagnoses of 100% of the member-breeders who are members of the Via Lacta grass-fed milk policy by the end of 2019;
- define the priority areas of work to build an animal welfare action plan based on the diagnosis results.

In November 2018, during the joint commission, the first Well-being diagnosis grid was co-built by Prospérité Fermière, WELFARM and the cooperative's elected delegates in order to take Ingredia's customers' requests into account. Based on the Farm Animal Welfare Council and with the help of the WELFARM non-profit, this grid includes the following animal welfare criteria: locomotion, trust in humans, body condition score, state of cleanliness and presence of injuries. The objective is to carry out the diagnoses that will allow La Prospérité Fermière/Ingredia to take stock of current practices and implement action levers, if necessary. These diagnoses are part of an innovative quality approach that consumers are looking for. Animal welfare must be a priority for our breeders and the first tests carried out on Via Lacta producers show us that our members meet customer expectations.









In 2019, all Via Lacta breeders will be contacted by Prospérité Fermière/Ingredia to diagnose their herds. Still in a cooperative and positive spirit, the advisers will be able to discuss with breeders in order to answer any questions about animal welfare. Too often criticised by a poorly informed society, farmers now have the opportunity to show that their everyday work respects animals and that they are animal welfare players and not the contrary. It is therefore towards this idea that La Prospérité Fermière/Ingredia is committed to ensuring that animal welfare is correlated to the well-being of its members.

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### LEARN TO SCORE YOUR ANIMALS

**Using the grid, score your animals during breeding and before sending them to the slaughterhouse:**

- > Based on an observation of the animal standing on the side, the grid is used to score its state of cleanliness using 4 classes: A, B, C, D
- > The areas to be judged are those extending below a line from the tail attachment to the top of the shoulder.

CLEANLINESS CLASSES	SIDE	HINDQUARTERS
<b>A: CLEAN</b>		
No soiling on the animal or trace amounts of dirt.		
<b>B: MINOR SOILING</b>		
Areas of soiling extending over the lower half of the thigh and the lower abdomen and sternum.		
<b>C: SOILED</b>		
Areas of soiling extending from the upper thigh (trochanter) to the front of the sternum.		
<b>D: VERY SOILED</b>		
Areas of soiling extending from the buttock (hip) to the tip of the shoulder. The soiling rises on the side to the top of the flank and forms a thick crust.		



## Even more for animal welfare

La Prospérité Fermière/Ingredia has signed a partnership charter with the French non-profit WELFARM that works for animal welfare. The cooperative is particularly pioneering on this subject because its Via Lacta specifications are oriented towards animal welfare and are in line with the CSR dynamics undertaken by the company.



Ghislain Zuccolo, Managing Director of WELFARM,  
Samuel Bar, Chairman of Prospérité Fermière/ Ingredia

«We are committed to working with the WELFARM non-profit to go even further in terms of animal welfare with our breeders,» said Samuel Bar, Chairman of Prospérité Fermière/Ingredia. This partnership has been signed for two years. The first phase of the partnership focuses on animal welfare diagnostics at 100% of farmers involved in the Via Lacta grass-fed milk scheme by the end of 2019. These diagnoses, carried out on the basis of a grid built with the cooperative, will make it possible to assess all aspects of animal welfare: feed, milking, buildings, breeding... The second phase will define the priority areas of work to build an animal welfare action plan based on the diagnosis results.

«Highlighting these actions will help farmers to progress. We are here to support them in order to facilitate this transition to an even more virtuous model,» explained Samuel Bar. «WELFARM's role is to support the cooperative in its thought processes and actions to change breeder practices in order to better take into account animal welfare,» said Ghislain Zuccolo, WELFARM's Managing Director.



## Well-being for production, animals... and people

Delegates gathered around WELFARM and Gènes Diffusion to discuss animal welfare.

Gènes Diffusion presented genetic innovations for animals and people, including the Hornless or Polled gene. Several reasons lead to the current use of the Hornless gene in cattle: time savings and less labour requirements when dehorning, additional safety when moving animals, compliance with European directives on animal welfare.

The implementation of the «Foot Health» and «Acetonemia» indexes, which will help producers in the choice of breeding animals, genetics adapted to robotic milking and «Beta Casein» with the A2 allele, were also presented.

Sandy BENSOUSSAN-CAROLE from WELFARM then presented the non-profit and the main areas of work provided for in the agreement signed with the cooperative: animal housing, calf practices, pain management, animal health and animal transport. The delegates then worked on the content of the diagnosis that will be made of all Via Lacta members and producers who wish to have it starting from January 2019.



## Longevity challenge

Proposed by the CSR Commission, the longevity challenge is based on voluntary work. The main criterion is the highest average dairy cow age. A criterion will be used to decide between dead heats: the presence of cows with more than 100,000 litres in their career. Launch planned for January 2019.





Interview with  
**Sandy  
BENSOUSSAN-CAROLE**

*Animal welfare researcher at WELFARM.*



### What are your activities at WELFARM?

We are first and foremost an animal protection non-profit. We were created to fight against industrial farming. Our first actions concerned poultry farming. We are now focusing on dairy producers. We inform the general public about farmers' methods, ensure scientific and technical monitoring of new breeding methods with regard to their impact on animal welfare, and support farmers so that they can adopt best practices.

### What does your collaboration with La Prospérité Fermière / Ingredia entail?

We will support the La Prospérité Fermière advisers to take stock of the practices of breeders registered in the Via Lacta scheme. This diagnosis will take the form of a survey of farmers and observations of animals on the farm. Farmers must comply with precise specifications: they must use straw bedding in the stables, the animals must graze for a minimum number of days per year, the feed must be GMO-free, etc. The aim is to analyse practices with regard to animal welfare, to identify the most virtuous ones and propose areas for improvement. The inventory and observations cover the entire herd, i.e. not only the cows in production, but also the heifers and calves. Prospérité Fermière dairy advisers will visit all farms, talk to farmers, make observations, collect data that will then be processed.

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In collaboration  
with Prospérité Fermière, WELFARM is  
conducting a survey to analyse animal  
welfare practices and propose areas for  
improvement.

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### How will the results of this survey be used?

This survey is part of the farmer support and continuous improvement process. It will be used to make proposals for improvement in the short, medium and long term. It is fully collaborative. It is not a question of stigmatising certain farmers, but of helping them by setting up, for example, exchange groups between farmers on certain practices of interest from the point of view of animal welfare.

## Artificial intelligence and connected collar

Lituus, a start-up company in Lille, is developing the first specific animal welfare connected collars. These collars analyse the condition of each cow and its behaviour 24 hours a day to permanently inform breeders, so that they can react as quickly as possible. For example, the collar will measure the herd's rhythm (activity, rest, ingestion and rumination) and its well-being (time spent on pasture, thermal and light comfort). It is the first connected object to be capable of measuring well-being. To go even further in this innovative and dynamic approach, La Prospérité Fermière/Ingredia is working with start-ups such as Lituus, which creates decision support tools for farmers and animal welfare.

The objective of this start-up is to act for breeders and to help them in their strategic and technical choices. A breeder works on average 14h/day and the Lituus collar is a real performance tool that will improve farm profitability by reducing working time. Detecting a cow's physiological and behavioural barriers takes time and requires a lot of attention. Breeders do not always have the time to do it and minimal problems persist and become, in the long run, obstacles to the farm's production. Qualifying and above all quantifying well-being is not always easy, Lituus offers this ability to our members and allows them to always improve their performance.



Lituus at SIAL





## Interview with Roman Igual

*Chairman of LITUUS, a start-up company specialised  
in connected objects for agriculture.*



### How does the connected LITUUS cow collar work?

With my associate with whom we created LITUUS, we are specialised in connected objects. We both wrote a thesis on this subject. We have long been interested in animal welfare. My partner worked on a connected object project for rhinos in South Africa to limit poaching and I myself had many exchanges with breeders in the Finistère region, where part of my family comes from.

So we decided to develop a connected collar for cows. It has a specificity: it covers all aspects of animal welfare. It monitors the environment and health. We monitor the animal's condition using sensors, which makes it possible for us to anticipate possible health problems and allows us to determine the right time to inseminate a cow. It is the only existing collar to be so complete.

### What are its advantages for breeders?

Farmers work seven days a week and many hours a day on their farms. This collar provides them with valuable information and frees up time. They can track all their animal parameters using a dashboard and we are in the process of setting up a text message alert system. More generally, this collar makes it possible to increase productivity. The Institut Supérieur d'Agriculture de Lille with which we work, has carried out a study showing that when animals are not in their comfort zone, milk production can drop by 30%.

### How do you work with La Prospérité Fermière/Ingredia?

We are currently in the test phase and La Prospérité Fermière/Ingredia has allowed us to deploy our solution on several farms in order to finalise the tests. We should move to the industrialisation phase as early as June 2019.

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**If animals are not  
in their comfort zone, their milk production  
can drop by 30%.**

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## A thousand Fario trout released into the Ternoise

On 29 September 2018, the «La Gaule Populaire» non-profit, la Prospérité Fermière/Ingredia and Descamps Lombardo met on the banks of the Ternoise river to release Fario trout fry. Besides this sustainable development aspect, there is a real scientific interest in this approach. Indeed, as milk is 90% water, it is important to maintain the good quality of this liquid within our territory. The re-stocking of the Ternoise will have a beneficial effect on the structuring of the banks bordering our members' pastures. The arrival of new plant species will allow better colonisation and stabilisation of the banks. The roots will limit erosion risks and will act as genuine filters for our soils and the Ternoise.

Pasture bordering watercourses will provide more stability for livestock.



In addition to this stability aspect, the establishment of plants limits the leaching of pastures and offers a better use of fertiliser inputs on fodder crops but also on permanent pastures. Thus, it is the nutritional qualities of the fodder that benefit from the re-stocking of the Ternoise. Finally, these new plant species will gradually colonise the pastures and provide diversity in permanent grasslands.

Our commitment to protecting biodiversity is in line with the group's CSR policy and is beneficial to the sustainability of rural grazing in our region.







## Interview with **Arnaud Rousselle**

*River technician for SYMCEA (Syndicat Mixte Canche et Affluents)  
and Chairman of the «La Gaule Populaire»  
non-profit which unites angling enthusiasts  
in the Pas-de-Calais.*



### **What actions are you taking to promote biodiversity in Ternoise?**

Since 2012, several actions have been taken to remove obstacles to migration to the Canche catchment area extending from Magnicourt-sur-Canche to Étaples. They concern migratory fish, namely salmon and sea trout. More recently, as part of a partnership with Ingredia, we have reintroduced trout fry that will mature after two or three years depending on predation, as well as adult males and females.

### **What is the connection between Ternoise biodiversity and the pastures?**

By acting to restore the Ternoise to its natural state, thanks to the repopulation of its species and a very good ecological status, we undeniably act on all populations (flora, fauna, fungi, micro-organisms). This action goes well beyond aquatic specimens, it allows the reintroduction into the environment of pollinators, plants and mammals which, through their way of life, contribute to the proper functioning and maintenance of banks and pastures. These actions contribute to the quality of fodder in the Prospérité Fermière cattle herds, but also to the quality of the water the herds drink or to the maintenance and stability of the pastures. Otherwise, the banks could disappear and with them, over the years, the pastures. It is indeed a butterfly effect; a few trout released into the Ternoise one day will have a major role for years to come. And the first results are already there: a few eels have been sighted in the Ternoise, it is a European level protected species... It would seem that it is good to live in our Pas-de-Calais rivers.

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**A few trout released into the Ternoise will have a major role in pasture quality for years to come.**

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## The ClimAgri approach

**Reducing emissions and energy consumption: ClimAgri specifically tackles this by proposing ways of saving money and obtaining financial aid.**

Launched in June 2016 by the Desvres-Samer local authority in partnership with the Caps et Marais d'Opale natural park, the regional chamber of agriculture and dairies, ClimAgri is an approach that proposes action to reduce agricultural energy consumption and to fight against climate change by limiting greenhouse gas emissions. Organised at Vieil-Moutier on one of the cooperative member farms, the ClimAgri day gathered together farmers aware of renewable energy production issues in the Boulogne region. Three conferences followed on the use of wood-energy hedges and solar photovoltaic and anaerobic digestion, during which major questions were raised.

Indeed, even if there are many levers and profitable installations to reduce greenhouse gas emissions, one of the major obstacles to installing a digester or photovoltaic panels is their cost. In fact, these solutions are often limited to a minority of farmers. One possibility to get around this problem: to form groups of several farms. However, smaller initiatives remain possible, such as the installation of a pre-cooler, or simply changes to a few practices: direct sowing, limiting nitrogen fertilisers, better management of non-productive animals.



*"Get organised so that everyone, whether large or small, takes part in reducing the impact on the territory"*



*Jean-Charles SELEX and Jeanne BRICOUT analyse the results of the diagnostics*

## Climate energy transition - Investment

### CAP'2ER software

Prosperité Fermière took advantage of the ClimAgri day to present the CAP'2ER software, for the automatic calculation of ruminant breeding environmental performances. This tool, which was created by the Breeding institute, can measure the different greenhouse gas emissions produced by a farm. It also identifies the most highly emitting sectors within it.

#### The subjects covered on the ClimAgri day

- Energy diagnoses
- Carbon storage
- Tractor configuration and eco-driving
- Wood-energy
- Limitation of nitrogen additions
- Food autonomy
- Organic farming
- Direct sowing
- Dairy equipment

## A new sleeve filter for our biomass boiler

In December 2018, we celebrated the 10th anniversary of our biomass boiler. It has a new sleeve filter (SF) and resumed service at the end of 2017. This more efficient equipment has significantly reduced the metallic particles contained in the emissions. Chromium and cadmium emissions were reduced by a factor of 4 in 2018 compared to 2016, by a factor of 20 for copper and more than 100 for lead and tin. This investment reinforces the impact of the biomass boiler on the control of our atmospheric emissions and consumption of fuels.

## Pre-treatment of our waste water, a protection for the waste-water treatment plant.

The St Pol sur Ternoise industrial estate has a reliable and efficient waste-water treatment plant (WWTP) that is subject to regular investments in order to maintain its performance and protect the natural environment. Ingredia has grown considerably over the past 10 years. The commissioning of new facilities (Tower 6, Evapo 6, Orthos, Popeye and Jano) weighed on the quantity and quality of our effluents. Although they are treated by the WWTP before release into the environment, each operator is required to comply with the terms of their effluent release agreement. Since last year, we have a water pretreatment unit using a physical-chemical process that allows us to remove part of the pollution before it leaves the plant. Since it was commissioned, it has effectively protected the station and the compliance of our effluents.



**DEFINE**

Define the problem



**MEASURE**

Quantify the problem



**ANALYSE**

Determine the causes of the problem



**INNOVATE**

Finding solutions to the problem



**CONTROL**

Maintain solutions over time



## Hygiene at the centre of the profession

The Hygieneo steering committee, composed of about ten employees, meets every 2 months and aims to improve the St Pol production site and the Arras pilot tool hygiene standards. The results of the hygiene audits of the various workshops, pest control, production environment monitoring, staff hygiene and project monitoring are reviewed. The major achievements of 2018 concern the support of zoning and partitioning projects in the concentration/drying workshop, the fight against pests and the reduction of the «foreign body» risk.

*“ Everyone is mobilised ”*



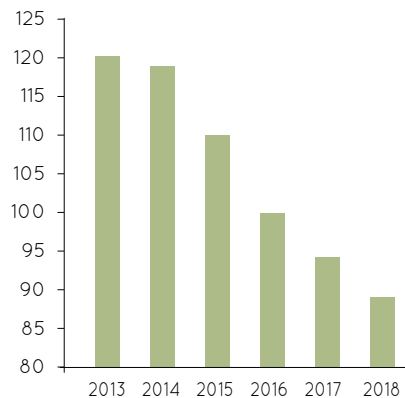
## Energy savings on farms

Thanks to awareness-raising campaigns, 39 energy saving projects were initiated on farms in 2018:

- 2 eco temp hot water production tank
- 13 farms with LED lighting
- 22 low consumption scroll tanks
- 2 milk pre-coolers



## CO2 EMISSIONS



### Hybrid vehicles, towards a truly green fleet!

2017 was marked by a significant turning point in CO2 emission reductions for the Prospérité Fermière/Ingredia fleet.

The CO2 emission average dropped below the dreaded 100g/km mark, mainly thanks to the work to standardise the range, the reduction of fuel consumption, but above all thanks to the will to stand out by referencing hybrid vehicles in the fleet of cars.

In 2018, 32 fleet vehicles passed under 89g/km of CO2 emissions.



### Collection exchange policy

For many years, the catchment area pivot, Prospérité Fermière has applied a collection exchange policy with the different dairies in the catchment area. In 2018 it represented 21.3 % of collection exchange milk.



## Recycling & Waste Recovery

### Recycling of churns with SUEZ

- Savings of 18.6T of churns in 2018

### Paper recycling:

#### Eco-responsible user behaviour

- 9,093 kg of paper & cardboard collected in 2018

### PC recycling:

#### A true second life for IT hardware!

- Donation of two screens to the school non-profit (SIVU Camblain l'Abbé...)
- Artois Insertion Ressourcerie Labelled Ordi 2.0: 500 kg of IT hardware donated

### Recycling printer/copier cartridges

- 57.40 kg in 2018



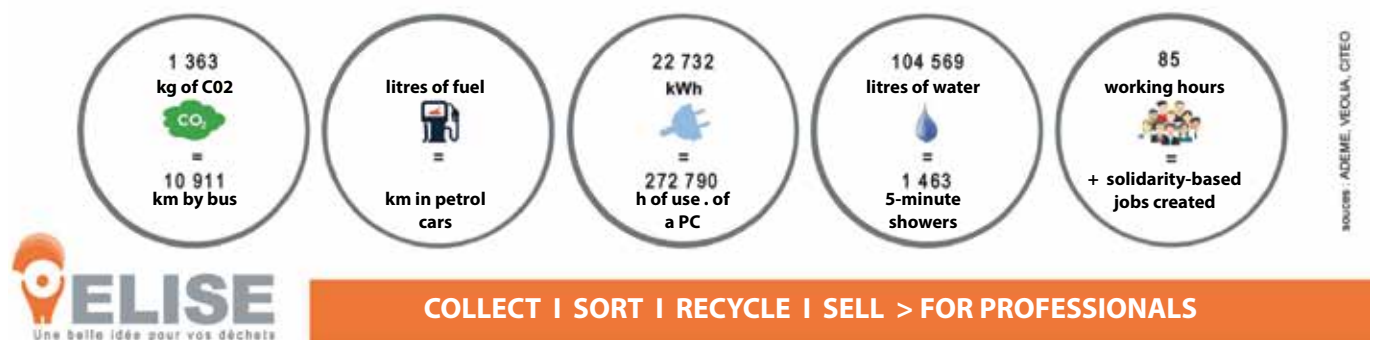
## Ingredia, 2010 recycling report with “Elise”

Initiated in 2010, the implementation of waste sorting at our Arras and then St Pol sites with the help of the «Elise» network in charge of waste collection and recycling, allows us to make an initial assessment. These environmental citizenship actions are part of our site CSR policy.



“Waste collection and sorting in Arras”

## THE ENVIRONMENTAL AND SOCIAL BENEFITS OF YOUR ACTION



# CULTIVATING EXCELLENCE

## INNOVATION, A PILLAR OF THE COMPANY'S STRATEGY

In 2018, R&D was reorganised to include the Application team and the structuring of innovation projects with the arrival of the Project Manager Officer. This makes it possible to bring more efficiency and reactivity to new product development.

To boost our innovation, we have been outsourcing part of our research to renowned academic partners, INRA (Proteinolab project) and the Charles Violette Institute (AllInPep project), for more than a year now, as part of Joint Research Laboratories. The work carried out within the framework of scientific theses focuses on the development of functional proteins and hydrolysates.

In 2018, the R&D team finalised the development of a new protein, 850A/Yogchiz, and filed a patent. It is the result of long-term work, which highlighted our innovation capacities and should bear fruit in the short to medium term.

The development of bioactive ingredients is another Ingredia specificity, and a solution for pre-diabetics has been finalised. Clinical studies to objectively assess the effectiveness of the product are ongoing and the launch is planned for 2019.

*Commissioning of the JANO project at the beginning of 2018, which has allowed us to increase our protein production capacity by 50 % with full success in the approval of this new production line by our customers.*

## Creation of LabCom, the second joint laboratory with INRA

**The purpose of LabCom will be to develop innovative dairy protein isolates that will be used as functional ingredients in high protein applications in food and human nutrition.**

These high-protein solutions, such as beverages, meet the requirements of the very specific markets that are nutrition of certain populations (such as seniors suffering from muscle atrophy), dietetics, (by providing products with a satiety effect) or athlete diets to develop muscle mass. This joint project, which will provide a real key

to differentiation on the dairy ingredients market, is structured in three steps: characterisation of existing products; understanding of the impacts of milk protein structures on the final function of the product; optimisation of this protein structure to achieve the functionality sought by the customer in the product in terms of colour, density, fluidity, etc.

This partnership will also result in the recruitment of two PhD students, an apprentice, a project engineer and two researchers.



## Launch of ALLInPep

**The Charles Viollette Institute (ICV) and Ingredia have signed a joint research team agreement (EMR) called ALLInPep (All in Peptide) to develop new dairy peptides of functional, organoleptic, nutritional and health interest.**

This project was selected as part of the call for a joint research team project launched by the Hauts-de-France Region and will receive financial support of 500,000 euros from the European Regional Development Fund (ERDF). This joint laboratory also participates in the regional research dynamic supported by the ALIBIOTECH 2014-2020 State-Regional Planning Contract.

The ICV, a regional agri-food and biotechnology research laboratory in the Hauts-de-France region, will contribute its skills in enzymatic screening and catalysis, production and purification at laboratory and pilot scale, and peptide analysis and characterisation. This agreement gives us access to very specialised expertise from the academic world and gives us access to top-of-the-range laboratory equipment.



Interview with  
**Hervé Gasnier**

*Director of Research and Food Safety at Ingredia.*



**You are working on the problem of old age, what solutions do you bring?**

This is a genuine public health problem that exists in France, but also worldwide, and for which we can provide real solutions. To improve the health of seniors, we need to act in two areas: to fight against malnutrition, they tend to eat less, and to help them better assimilate nutrients. Calcium-rich milk proteins such as micellar caseins, can be a valuable aid because they are well assimilated by the body and have two properties: they limit muscle loss and contribute to better bone health.

**Would it be enough just to drink milk to limit the effects of ageing?**

In general, as we age, we consume less milk. Instead, we prefer processed products such as yoghurts and dessert creams, which do not have sufficient protein density. We have developed nutritional supplements to create products with high protein density. They come in forms that are easy for the elderly to ingest, such as liquids or creams, because most of them suffer from swallowing problems. We are working on both the raw material - milk proteins - and the textures so that they can be included into products that are easy to swallow and taste good.

**Are you the only ones with this know-how?**

Very few of us have this type of skill. We are one of the world leaders in milk protein, especially micellar casein. We have a real technological lead over the competition.

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**Milk proteins help to combat the effects of ageing.**

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