Tereos, a market leader in sugar, starch and alcohol

A successful strategy of international expansion that enables Tereos to support its customers throughout the world and to benefit from market growth. Thanks to its global footprint, it can support changing consumer expectations and take full advantage of its capacity for innovation for the benefit of its customers.
KEEPING ONE STEP AHEAD
Joint interview

“’We can pride ourselves on our forward-looking strategy and on having the courage to take the right decisions.’”

What is your assessment of the year that has just ended, 2018-2019?

François Leroux  
As far as sugar beet is concerned, our business was affected by rainy weather during summer 2018, which caused a 5% fall in sugar beet yield by comparison with the five-year average. In total, the nine Tereos sugar factories in France processed approximately 18 million tonnes of sugar beet, compared to 20 million tonnes the previous campaign.

Alexis Duval  
We reported a good industrial performance all around the world, in spite of climatic conditions that caused lower sugar beet volumes in Europe and sugar cane volumes in Brazil and in Africa. This good set of results also shows the flexibility of our industrial installations, which are able to adapt to market variations. In Europe, the year was marked by the deregulation of the sugar market. In a sector historically regulated by quotas, this was a real revolution. Our competitors announced a number of projected factory closures, which testify to the severity of the crisis. The crisis had two primary causes: the bottom of the economic cycle of the world market, which combined in Europe with the effects of the deregulation of the sugar market.

Tereos was confronted with a fall in sugar prices, of course, but it had anticipated the effects on an operational level. We are maintaining the course we have set ourselves thanks to the strategy of diversification and international expansion first undertaken several years ago.

François Leroux  
In order to reduce the effect of this shock wave on its cooperative associates, Tereos sought to lessen the full impact of the market downturn on the price of sugar beet. The effort made by the cooperative to absorb the effects of deregulation were very
significant. This year of turmoil also proved to us the vital importance of the Group’s wide geographical footprint and its diversification. Our Sugar International and Starch & Sweeteners divisions account for over 90% of adjusted EBITDA over the 2018-2019 financial year. We will have to go further still if we are to be capable of absorbing market shocks in the future.

What other challenges does the Group face today?

Alexis Duval

We are observing a change in eating habits: sugar consumption is declining in some markets, such as Europe. On the other hand, there is growth in demand in Africa and in Asia: supporting the international development of our customers is crucial for the future. Tereos already generates 30% of its revenues in emerging countries. The ability to embrace international expansion will be decisive for future years.

François Leroux

We also consider that the subject of sustainability is central. It is one of our priorities today more than ever, and it is causing us to review some of our production methods. With more than 10% average annual growth, the organic food market is now worth €80 billion, approximately 40% of which is in Europe. The Group is developing its range of organic products, starting with the production of sugar from the 2019-2020 campaign in France, Mozambique and Brazil.

How would you say Tereos is better armed to cope with this situation than its competitors?

Alexis Duval

Tereos is one of the world’s only sugar producers to have carried out successful international expansion. Tereos can also count on acknowledged know-how in terms of operational excellence and performance plans. For some years, we have been adapting to the challenges of the sector and to our customers’ expectations. With regard to nutrition, Tereos is taking the best from the full range of its sweetener portfolio so that it can help its customers to reformulate some of their products, in particular with respect to preservative content and calorie balance. Indeed, this constitutes the work of our 145 experts and our six research and development centres throughout the world. One thing that distinguishes us is that we can offer our customers a wide range of sweeteners. Similarly, Tereos hasn’t hesitated to take full advantage of the potential of plant proteins. We are the world’s second largest producer of wheat protein.

François Leroux

Our cooperative associates’ commitment has allowed us to maintain a good level of production and ensure the length of our campaign was competitive. This constitutes a solid base for continuing to build a future for our production.

In this context, Tereos has defined its strategic priorities. Can you tell us what they are?

François Leroux

Price volatility remains one of our greatest concerns. Taking its consequence is not an option, because we have always defended the long-term survival of our farms. We need to limit its impact by pursuing our diversification and developing the added value of our products and services. This is the strategy that will allow us to loosen the grip of dependence on market prices.

Alexis Duval

The second is a prerequisite of our commodities market – I’m talking about competitiveness. We are pursuing our efforts: after first launching a performance plan covering 2015 to 2018, we have now launched a new programme, Ambitions 2022, which aims to go still further in operational efficiency. The target is a saving of €200 million. Safety plays a very big part, as does digital transformation. We are stepping up our efforts in this area, which is an indispensable driver of greater competitiveness, both upstream in agriculture and in our plants and distribution activities.

What role are Tereos’ employees and cooperative associates playing in this transformation?

François Leroux

Our cooperative associates obviously play several roles in this transformation. They are both suppliers of agricultural products to Tereos and customers of certain products and services, as well as being its partners, of course. Our farms are undergoing a profound crisis. We have taken significant steps to boost the competitiveness and adaptability of farms.
We have to focus on a long-term vision and entrepreneurial spirit, values that farmers demonstrate every day on their farms. This causes us to constantly question ourselves about the future, looking for new growth drivers that will always keep us ahead of the field. It is more difficult now than it was in the past to provide our products with profitable outlets in an increasingly volatile and complex economic context. This is why we have to pursue our strategy collectively and with determination. We have to maintain the relations of trust that we have all taken many long years to build with our employees, our customers, our financial partners and our suppliers.

Alexis Duval  This is a moment of significant change for the company. Like any new page that is written, it is stimulating, but it can also raise questions. This is why we have opted for a participatory approach as part of our transformation plan, Ambitions 2022. Tereos teams have been asked to express themselves and to get involved directly. As a result, some 1,000 employee initiatives – individual, collective and local – will help us further improve our operational excellence.

This dynamic is built on dialogue between employees and their managers, which has the additional benefit of enabling individuals to set their own targets and meet them, thanks to the regular follow-up we perform. So our teams are now drivers of our transformation.

What are the next steps for preparing the Group’s future?

François Leroux  In the first place, we have to increase proximity with our cooperative associates on agricultural and cooperative issues, in an environment that is tougher than it was before on an agricultural level. In this context, it is important that the proximity with cooperative associates allowed by our model is fully exploited for agricultural matters that concern them directly. Then on an industrial level, we have to strengthen our development strategy, as the European sugar market requires us to perform more and more strongly, to diversify and to focus on growth markets.

Alexis Duval  Tereos is a cooperative group that developed in an environment of quotas, with regulated markets and guaranteed minimum prices. Our period is more uncertain, and it’s crucial to realise that a cooperative such as ours has to evolve if it is to adapt. It’s now more than a year since we launched a review of our medium-term strategy and the changes that we want to put in place in the company.

“Faced with the industry’s need to restructure in Europe, Tereos is holding its course and is managing to stand firm thanks to the strategy of diversification and international expansion first undertaken some years ago.”

François Leroux
The solidity of the Tereos model

Tereos has embarked upon a strategy of international expansion and diversification which now better empowers to face the volatility and deregulation effects of world markets. This strategy has been self-financed with no call for capital from cooperative associates. With solid foundations, Tereos can look to the future and the next stages of its development with confidence.

Withstanding cycles through diversification and internationalization

Controlling debt and building strong assets

Debt globally stable over ten years supporting assets worth more than €6 billion.

Creating long-term value for cooperative associates

Between October 2012 and June 2018*: €118 million paid in dividends and interest on shares, added to which is €110 million in the form of price complements.

Return on capital, which takes into account the payment of dividends and interest on shares to cooperative associates, has averaged around 10% over the period 2006-2018, excluding price complements and Tereos advantages. It reached 12% for the year 2018-2019.

* 2019 dividends will be voted on at the General Meeting on June 26, 2019.
A development strategy that enables to benefit from dynamic growth markets

**SWEETENERS**

**Market trends**
- Strong growth in demand for maltodextrins, driven by Asia and stimulated by baby food
- Promising outlets: green chemistry and fermentation

<table>
<thead>
<tr>
<th>Maltodextrins</th>
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<tr>
<td>65%</td>
<td>1/3</td>
</tr>
<tr>
<td>growth in global demand between 2013 and 2023</td>
<td>of consumption will be devoted to baby food by 2023</td>
</tr>
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</table>

**STARCHES**

**Market trends**
The European market is driven by the consumption of paper and corrugated cardboard. The sustainable packaging sector constitutes a significant opportunity:
- Environmental issues
- Rise in e-commerce

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<tbody>
<tr>
<td>60%</td>
<td>85%</td>
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<tr>
<td>of starch consumption in the EU (2.6 Mt) related to e-commerce</td>
<td>of corrugated cardboard is used for packaging materials</td>
</tr>
</tbody>
</table>

**PLANT PROTEINS**

**Market trends**
Growth in demand for wheat proteins, with a 30% increase in export markets driven by:
- Animal nutrition, particularly in aquaculture
- A shift in eating habits, with an increase in plant proteins

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<tr>
<td>10%</td>
<td>60%</td>
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<td>growth in demand for wheat proteins in the food industry between 2014 and 2020</td>
<td>of fish consumed as human food will be raised by fish farming by 2030</td>
</tr>
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Governance that guarantees our long-term strategy

The governance of Tereos allows the Group’s long-term strategy to be defined and implemented. Our governance aims to permanently combine operational efficiency and close relations with the cooperative associates. It is based on a strong link – and a clear division of responsibilities – between elected representatives and the management.

The Supervisory Board appoints the Chief Executive Officer and approves the strategy and major financial decisions proposed by the Executive Board. It sets the price of raw agricultural commodities and the amount of net income to be distributed.

The Executive Committee proposes to the Supervisory Board any policies that it considers necessary in the best interests of both the company and its cooperative associates. Then, working alongside the Management Committee, the managers and all teams of operational and functional divisions of the Group, it heads up operational implementation.
Tereos, committed to sustainability

Tereos is committed to a strategy of sustainable growth, which is reflected by the fact that it procures its raw materials from direct channels, manages its use of energy responsibly and takes the best from all parts of the plant. In its commitment to CSR, Tereos contributes to seven Sustainable Development Goals (SDGs) of the United Nations.

Example of action
• 53% of our raw materials are evaluated or certified sustainable by recognised standards, such as Bonsucro and the SAI platform.

Example of action
• In 2018, we were awarded a Gold rating by EcoVadis. Tereos ranks among the top 5% of companies rated by the independent CSR evaluation platform.

Example of action
• Better meeting consumer expectations, particularly through Sweet & You, our service for supporting customers in the nutritional reformulation of their products.

Example of action
• We place the circular economy at the heart of our model, processing 99% of our raw materials.

Example of action
• More than 90% of the raw materials that we process are purchased directly from farmers.

Example of action
• Only 9% of sugar factories' water needs is drawn from wells: the rest is supplied by the water content of the processed sugar beet.

Example of action
• The development of cogeneration* enables our sugar factories in Brazil to be energy self-sufficient during the campaign.

Example of action
• In a twelve-month period between 2017 and 2018 by Utopies, an agency specialising in corporate social responsibility, has highlighted the contribution to the local economy made by our sugar factory in Bucy, northern France.

How Tereos helps to make our regions more attractive

Illustration of a local footprint study at the Tereos site in Bucy, France

A local footprint study carried out over a twelve-month period between 2017 and 2018 by Utopies, an agency specialising in corporate social responsibility, has highlighted the contribution to the local economy made by our sugar factory in Bucy, northern France.

1 job at Tereos = 14 jobs generated in the region

The site creates a direct impact through its presence in Bucy

212 employees work on the Tereos site in Bucy

Indirect impact is created in the supply chain thanks to purchases of raw materials, energy, logistics, etc.

1,330 indirect jobs are supported

The site generates induced impact through household consumption and the expenditure of local government agencies

1,643 induced jobs

Of a total 3,185 jobs generated, 51% are located in the Hauts-de-France region, of which 38% in the Aisne department.

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OUR PRIORITIES FOR THE FUTURE
1. OPERATIONAL EXCELLENCE
Tereos operates in commodity markets subject to global competition, where the cost price of products constitutes a key factor. Improved competitiveness through the entire value chain is a clear priority, from the upstream agricultural phase to industrial efficiency and effective support functions through to logistics. To this end, the Ambitions 2022 programme has been rolled out over all our businesses and our geographies. Beyond the goals it sets for costs and economic performance, the programme incorporates ambitious targets with employee safety, product quality and sustainability.

2. MANAGE THE IMPACT OF VOLATILITY
Beyond price variations for raw materials and energy and exchange rate fluctuations, Tereos is exposed to the inherent volatility of the prices of its finished products, whether sugar or certain starch and ethanol products. The Group has taken measures to limit its impact and reduce exposure to market cycles; it has adopted new areas of expertise (market research, hedging on futures markets, etc.) and is firmly pursuing its strategy of diversification, whether in terms of geographies or of products and services, with a significant proportion of revenues generated by products other than sugar and ethanol. With an outlook that is open to the world, Tereos takes full advantage of its geographical diversification to distribute its products and services in 130 countries.

3. ADAPT TO CHANGES IN CONSUMER EXPECTATIONS
For the Group, transforming means entering into growth markets and looking outwards, but it also means responding to the new needs of consumers with regard to nutritional issues and to sustainability. This takes the form of jointly creating innovative nutritional formulations with our customers and the launch of new ranges of sweeteners, starch products and plant proteins. It also means a strong commitment to sustainable production, with a particular emphasis on short circuits, which are made possible by our strong local roots at regional level.

“Our need to continue our transformation to set new targets in terms of agricultural, industrial and logistical competitiveness. The aim is to remain competitive on an international level. It also means continuing to diversify.”

Vincent Pobelle, Director of Transformation and CEO’s Chief of Staff
Ambitions 2022: progress to date

Ambitions 2022 is a plan aiming for operational excellence, based on five key priority areas: safety, competitiveness, quality, compliance and sustainability. It is based on an philosophy of continuous improvement.

Safety Day

For the past two years, a safety day has been organised on all sites around the world. It was held on March 20 this year on all sites, and was attended by members of the Management Committee.

- Thousands of participants
- Involvement in training and workshops (e.g. first aid)
- 80 initiatives submitted by employees via a suggestions box

All Committed to Safety

An essential component of the Ambitions 2022 programme, safety is crucially important to the Group. Tereos is endeavouring to reduce both the severity and the frequency of workplace accidents. A roadmap made up of eight key actions is in force throughout the entire Group. One of these lays down golden rules for employees, subcontractors and service providers working on Tereos sites. There is just one goal: zero accidents.

"Safety is at once an absolute imperative, a part of daily life and the result of a certain operational discipline."

Pascal Beaufere, Director of Operations

0 accident

Romania achieved a year without a single accident in 2018

Developing of a Management Model at the Heart of Ambitions 2022

Tereos is aiming to introduce a new management model that encourages initiative and empowers employees through a more participative approach. This is a key part of the Ambitions 2022 programme. The goal is to work better together to achieve greater efficiency, both individually and collectively. The process began by listening carefully to employees on the ground in order to find out their needs in terms of operations and working methods, prior to giving them the means to put in place concrete actions to improve performance. In this way, change is initiated by the employees themselves.

The European Campus, Serving the New Managerial Project

In summer 2018, Tereos opened its new European Campus, which accommodates around 500 employees previously spread over a number of sites. The Campus is intended to encourage sharing and cross-functional cooperation, with an ambition of fostering working methods that are more efficient and more collaborative to leverage greater benefit from the complementary nature of the Group’s businesses. It centralises all the teams and functions dedicated to our European customers (marketing, research and development, customer support, supply chain, etc.).

BSC: Support Functions Helping to Boost Performance

Tereos has set up two business services centres in São José do Rio Preto, Brazil, and Lille, France, dedicated to the administrative functions (accounts, orders, invoicing, IT help desk and HR). Their role is to provide expertise in the support functions backing up operational activities in Europe and in Brazil, with the aim of optimising processes and achieving greater efficiency and compliance.
A BEST-IN-CLASS LOGISTICS PARTNERSHIP FOR EXPORTS

Tereos has signed a commercial partnership agreement with VLI, one of the leading rail companies in Brazil. The aim is to create a benchmark logistics infrastructure for exporting sugar in Brazil, the world’s leading producer and exporter of sugar. Under the terms of the agreement, Tereos is investing in the construction of two sugar warehouses. This gives the Group an opportunity to strengthen its presence and its export capacity in Brazil, ahead of future growth in its brown sugar production and sales activities.

BIG DATA DRIVES OPTIMISATION AND CONTINUOUS IMPROVEMENT

The Ambitions 2022 programme involves an ambitious digital transformation plan. Among the main tools currently in place, the use of Big Data, whether based on input and output or on working parameters, has already succeeded in identifying significant levers for optimisation. By combining the many sets of data available with mathematical algorithms, it is possible to identify optimum operating standards for key production processes, thereby reducing variability, making energy savings, etc.

OPERATIONAL EXCELLENCE
MORE THAN 100 TONNES PER HECTARE!

Cane sugar processing constitutes the third source of revenues for Tereos. A leading player in the sector in Brazil since 2000, Tereos launched a programme called “More than 100 tonnes” in 2017. It aims to produce more than 100 tonnes of sugar canes per hectare by 2020, compared to 83 tonnes at the end of 2017. It combines a number of innovative technologies intended to improve precision farming techniques: image capture by drones and satellites, reliance on algorithms, use of tablets by employees for carrying out observations and surveys in the sugar cane fields, and so on. As a result, farmers can be offered meticulous recommendations for managing their crops and improving long-term performance.

INTERNATIONAL EXPANSION: A WORLD OF OPPORTUNITIES

The end of sugar quotas is accompanied by the freedom to export with no limitation on volumes. In this context, Tereos is seeking to confirm its leadership thanks to its long-term strategy, in which international expansion has played an important part. With a presence in 18 countries, a trading and merchandising subsidiary and distribution of its wide product range in 130 countries, the Group is strongly positioned on a commodities market that has now become global. It has adopted the tools it needs, both in terms of product innovation and the supply chain, to strengthen its competitiveness and seize opportunities relating to the growth in food demand, particularly in Asia, the Middle East and Africa.
On November 20, 2018, Tereos inaugurated its export logistics centre in Escaudœuvres, on the site of one of its oldest sugar factories, close to Cambrai, in the Hauts-de-France region. The inauguration ceremony was attended by Alexis Duval, Chief Executive Officer of Tereos, François Leroux, Chairman of the Supervisory Board of Tereos, and Xavier Bertrand, President of the Hauts-de-France regional council. The bagging and containerisation site is dedicated to overseas sugar exports: it constitutes the nerve centre for Tereos Sugar France’s export strategy and confirms its ambition to seize new international market opportunities. Its location on the banks of the Escaut Canal, close to one of the main platforms of the future Seine-Nord Europe Canal, is ideal for waterway transportation of Tereos’ sugar production to the major ports of northern France and Europe, to supply the global market. The bags are loaded using mobile telescopic conveyors that reach into the containers. These are transported by road to the inland port of Valenciennes then transhipped by river barges to the ports of Antwerp and Dunkirk. The Group has opted for waterway logistics for both economic and environmental reasons – benefits include lower CO₂ emissions and decongested road networks. The aims are taking the best from local agricultural production and supporting the international expansion of the region’s river and port logistics. Located roughly ten kilometres from Marquion, Escaudœuvres is expected to become one of the biggest multi-modal platforms. With the addition of volumes of sugar, cereals and starch from Tereos facilities in Picardy, further upstream of the canal, the potential of the site will be one million tonnes per year.

“...This new strategic tool dedicated to overseas sugar exports is a key part in the Group’s strategy for the post-sugar quotas period and strengthens Tereos’ roots in the Hauts-de-France region.”

Nicolas Lemaire, Director of the Escaudœuvres site
Many agri-food companies are setting up in Singapore, the heart of the Asian sector and a powerful ecosystem of research and innovation. The region boasts many talented scientists in the areas of food processing and nutrition, as well as aquaculture, an important sector for the range of protein products that Tereos supplies for animal feed. In autumn 2018, we opened an R&D centre in Singapore, where the Group’s research teams are developing new solutions with their customers in the Asia Pacific region for food products that are highly demanded by local consumers, such as noodles, bakery products, confectionery, teas, sauces, snacks and beverages. The centre is intended to be a place for collaboration and synergies where Tereos’ food scientists can work with their customers and their international partners on improving the nutritional qualities of food by devising tailor-made, innovative and sustainable formulations. One of these innovations, the Sweet & You offer, makes it possible to create optimal sweetening formulations that perfectly suit recipes developed by customers, providing the best response to consumer expectations in terms of flavour, calorie control and fibre content.

The opening of this R&D centre in Asia will guarantee success in the design of solutions tailored to consumers in Asia Pacific. It’s also a springboard for developing our network of scientific research in the field of nutrition.”

Anne Wagner, Tereos R&D Director

Located in the Singapore Biopolis*, our R&D centre collaborates with top-ranking academic research centres and institutions to carry out studies on consumer trends and changes in food formulations. “We are working in close collaboration with our Asian customers on the inclusion of our ingredients in their recipes,” says Kenneth Wang, Technical Support and Application Leader.

Expanded its industrial network with two factories in China, a factory in Indonesia and sales offices in Singapore, India, Vietnam and Hong Kong.

In the current context of rapid growth in consumption in Asia, the launch of the Tereos R&D centre constitutes a strategic opportunity for the Group and further strengthens its local roots.

*Singapore Biopolis: A science park dedicated to life sciences.
Alongside its partners, Tereos is committed to a strategy of diversification and development, seeking to take the best from agricultural production, improves industrial efficiency and reinforce its virtuous logic of a circular and sustainable economy. This ambition has generated new partnerships along the value chain, from the upstream agricultural phase to industrial installations, and from R&D to the supply chain.

**Challenge**
Meet the growing worldwide demand for organic sugar

**Solution**
With many years' experience of selling organic sugar in Europe, Tereos has now begun developing its own range. This development began with the production of organic sugar based on French sugar beets and sugar cane in Mozambique and Brazil. Following conclusive agronomic and industrial trials in France in 2018, the Attin sugar factory is preparing to process its first tonnage of organic sugar beets in September 2019. Other organic productions, including plant proteins, animal feed and alcohol, are already under consideration.

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**ORGANIC SUGAR**

Sylvain Bailleul  
Farmer, GAEC des 3 Vallées

“We have been a cooperative associate for many years, and now we’re working alongside Tereos to develop an organic sugar beet sector in France.”

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**SHORT CIRCUITS**

Éric Desbonnets  
Vice President Supply Chain, Coca-Cola European Partners

“We have been a cooperative associate for many years, and now we’re working alongside Tereos to develop an organic sugar beet sector in France.”

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**Challenge**
Favour local production and short circuits

**Solution**
Coca-Cola made in France. The sugar beet fields are only 34 km from the Tereos sugar factory in Lillers, and the sugar produced there is less than an hour’s road transport from the Coca-Cola plant in Dunkirk for local bottling. Less transport means less CO₂ in the atmosphere. Production is local and traceable!

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Sylvain Bailleul  
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**INDUSTRIAL SYNERGIES**

**Challenge**  
Capitilise on industrial synergies to create new virtuous models.

**Solution**  
In 2017 and 2018, two businesses set up production units on the site of the Tereos starch facility in Nesle, in northern France. Nigay will benefit from a direct source of glucose to manufacture its caramels. InnovaFeed will soon be receiving supplies of starch by-products as food for breeding insects that provide protein in animal feed. Short-loop processing optimises the use of natural resources, with a positive impact on biodiversity and climate change.

**Challenge**  
Produce biosourced materials from agricultural raw materials for non-food applications

**Solution**  
A biosourced insulation foam for the building industry, which will be manufactured from sorbitol by Soprema, one of Tereos’ industrial partners. Jointly financed by Tereos, Soprema and the region of Alsace, this research project is the culmination of three years of collaboration and the subject of a doctoral thesis by Pierre Furtwengler, a Strasbourg-based researcher.

**Challenge**  
Diversify sustainable outlets for our products

**Solution**  
During the 2018-2019 campaign, Tereos Sugar France brought into service a Scania truck running on ED95, a fuel consisting of approximately 95% ethanol and 5% denaturants. Produced from French sugar beet and waste, ED95 is a sustainable local alternative that supports agriculture. Several regional transporters have had the opportunity to test the truck, which is very effective, and exemplifies a virtuous logic in which sugar beet is used to transport sugar beet.

**DIGITALISATION**

**Challenge**  
Putting digital and precise technology at the service of our farmers

**Solution**  
In Brazil, as part of the “More than 100” program, the Galileo initiative is using drones and satellites to scan the 300,000 ha of sugar-cane, coupled with automated sensors on the ground on our machineries, the weather stations and collected data from 4D0 tablets. Tereos’ data scientists analyse all the information and recommend the finest cane treatment and its timing for an optimal agricultural yield, including the best sequence to fertilise the plots.

**Challenge**  
As of now, bioethanol can contribute to reducing CO₂ emissions by more than 90%.

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**BIOSOURCED MATERIALS**

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**Challenge**  
This subject fascinated me because it combined a genuine industrial challenge and an environmental concern.

**Solution**  
A biosourced insulation foam for the building industry, which will be manufactured from sorbitol by Soprema, one of Tereos’ industrial partners. Jointly financed by Tereos, Soprema and the region of Alsace, this research project is the culmination of three years of collaboration and the subject of a doctoral thesis by Pierre Furtwengler, a Strasbourg-based research engineer.

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**BIOETHANOL**

**Challenge**  
Diversify sustainable outlets for our products

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**Solution**  
During the 2018-2019 campaign, Tereos Sugar France brought into service a Scania truck running on ED95, a fuel consisting of approximately 95% ethanol and 5% denaturants. Produced from French sugar beet and waste, ED95 is a sustainable local alternative that supports agriculture. Several regional transporters have had the opportunity to test the truck, which is very effective, and exemplifies a virtuous logic in which sugar beet is used to transport sugar beet.

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2018-2019, A YEAR AFFECTED BY THE END OF EUROPEAN QUOTAS
Following an exceptional year in 2017, the results of the 2018-2019 sugar beet campaign for Tereos Sugar France were characterised by an average yield slightly lower than the five-year average, with variations from one region to another, but also by a solid operational performance by the plants, where the Ambitions 2022 plan is already largely underway.

The nine sugar factories processed approximately 18 million tonnes of sugar beet. On average the campaign lasted 124 days, despite a 5% fall in sugar beet yield compared to the five-year average, mainly owing to the climate conditions of summer 2018.

The autumn weather made it possible to obtain sugar beets with a record level of sugar content compared to the five-year average. For the next campaign, sugar beet sowing by Tereos’ cooperative associates enable to envisage sustaining a roughly comparable surface area (down a few percentage points, in line with Tereos’ proposal). Weather conditions in spring 2019 led to a good emergence. This performance, combined with low soil tare, had a favourable impact on logistics from field to factory with a 5% reduction in the number of trucks on the road, resulting in positive environmental impact.

Thanks to our performance plans, to investments made and to the commitment of our teams, Tereos has confirmed the reliability and flexibility of its manufacturing facilities, which allow it to optimise sugar production. The Escaudœuvres logistics centre again achieved an excellent performance in its second year of operation, exporting 200,000 tonnes of sugar to the Middle East and Africa in 2018.

Safety is a core priority for Tereos Sugar France. The Group strengthened initiatives to improve the safety of its employees and its logistics providers. The actions implemented on each site have resulted in a substantial fall in the number of accidents recorded during the campaign.

New services with high added value intended for livestock farmers have been introduced. Tereos is prioritising the delivery of overpressed beet pulp, which is acclaimed by livestock breeders because of its nutritional properties. 1.5 million tonnes of overpressed pulp were sold to more than 4,000 farmers in 2018. The campaign was also marked by new services for livestock breeders and by the launch of the PulpMix service, which enables breeders to prepare a semi-complete or complete feed on the farm, offering them a guarantee of performance and a source of time-saving.

Tereos Sugar Romania confirmed its position as one of the leading sugar producers in this part of Europe with production of 39,000 tonnes of sugar. The Ludus sugar factory enjoyed an accident-free year, which is a great valuable achievement in terms of safety!

In spite of unfavourable weather conditions in Romania, an increased surface in 2017-2018 made it possible to slightly increase the volume of sugar beets processed. For 2018-2019, contracts have already been finalised with planters for more than 7,500 hectares, meaning that the length of the next campaign should be more than 100 days.

Management and all teams put the safety policy at the heart of their actions. New personal protective equipment was distributed, two safety audits were carried out and many initiatives were taken by employees, in particular to improve the communication of safety instructions.

Tereos has been active in the Czech Republic since 1992. It operates two sugar factories and three distilleries as well as a packaging plant. The company’s solid presence and its level of operational performance enabled it to offset particularly unfavourable weather conditions.

In the 2018-2019 campaign, the Dobrovicue and České Meziříčí sugar factories processed over 2.5 million tonnes of sugar beets, harvested from 38,500 hectares of land, like last year. The 106-day campaign suffered from unprecedented weather conditions. Because of very high temperatures, the sugar content of the sugar beet reached a record level of 19.4%, but an exceptional drought impacted the average sugar beet yield, which fell from 84 tonnes per hectare in 2017-2018 to 66 tonnes. Sugar production this year totalled 300,000 tonnes, which is 70,000 tonnes less than last year.

Meanwhile, the distilleries produced more than 90,000 m³ of alcohol and ethanol during the campaign.

Although production has decreased, Tereos has remained able to meet all its customers’ demands and maintained its strategic position as one of Eastern Europe’s leading producers of sugar and alcohol/ethanol.
Tereos Sugar & Energy Brazil demonstrated a solid operational performance throughout 2018-2019, positioning Tereos favourably among the leading players in the industry in Brazil.

In the 2018-2019 campaign, Brazil did not enjoy weather conditions that were favourable to its plantations. Persistent drought in the Centre/South region, the country’s main producing region, had an impact on yields of sugar cane. Tereos processed near 18 million tonnes of sugar cane, compared to 20 million tonnes last year.

Throughout the year, Tereos Sugar & Energy Brazil continued its efforts to improve its operational excellence, confirming it as one of the best performing players in Brazil. In terms of agronomy, for instance, the Group achieved the best performance in the sector for the sugar content of its canes (over 140 kg/tonne). In agricultural operations, Tereos achieved very good productivity in cane cutting.

On an industrial level, Tereos main performance indicators (asset utilisation rate, yield and extraction rate, energy efficiency, etc.) were all at very good levels, well above the averages for the sector.

Tereos has formed a partnership with VLI to guarantee domestic and port logistics for its raw sugar production and trading businesses. In June 2018, Tereos and VLI announced a joint investment of €46 million for the construction of two sugar warehouses in the state of São Paulo, as part of the VLI rail network leading to the port of Santos. This partnership is accompanied by a long-term agreement for the transportation of 1 million tonnes of raw sugar per year.
18,300
direct jobs
are generated by the sugar industry in Reunion Island

REUNION ISLAND
Sole sugar-producing group in Reunion Island, Tereos produced 146,000 tonnes of sugar in 2018, in an unfavourable context.

The campaign was characterised by exceptional climatic conditions. Tropical cyclone Fakir brought torrential rains and wind gusts of up to 200 km/h, causing severe damage to plantations. As a result, Tereos processed a crop of 1.4 million tonnes of canes.

In this context, the interprofessional organisation took the decision to activate a recovery plan for the 2019 campaign. Growers were awarded exceptional aid.

The sugar industry generates more than 18,300 direct jobs.

MOZAMBIQUE
The factory produced 30,000 tonnes of sugar after a late start to the campaign and suffered from unusual rain conditions. Tropical cyclone Idai hit Beira, the largest city in proximity to the factory, but our site at Marromeu was unscathed.

Diversification to organic production was launched, with 150 hectares of sugar cane fields planted.

KENYA

The Transmara sugar factory, which is operated in partnership with Alteo, processed 730,000 tonnes of sugar canes, 72% more than the previous campaign.

Increased speed of throughput and continuous operation of the factory enabled in the production of 68,000 tonnes of sugar. Continued efforts were made to expand surfaces; the aim is to increase them by 4,500 hectares of sugar cane per year to reach 19,000 hectares in 2022.

TANZANIA

The sugar plant owned in partnership with Alteo experienced its second best performance ever, with more than 1 million tonnes of canes crushed and production over of 100,000 tonnes of sugar. The facility’s capacity continued to increase, shifting from an average throughput of 3,400 tonnes of canes per day in 2017-2018 to 3,570 tonnes of canes per day in 2018-2019.

EUROPE

Tereos is the third biggest player in the European starch market. The Group produces vegetal proteins, starch, sweeteners, alcohol and ethanol from cereals and potatoes.

During the past campaign, the quality of the cereals was satisfactory; the wheat had high protein content and starch content was good. The Group processed 3.8 million tonnes of cereals and roughly 370,000 tonnes of potatoes.

Tereos is the world’s second largest producer of vegetal proteins, experiencing strong growth in both European and export markets. Epi & Co, a new range of food products, was launched, based on the “GenVie” project, winner of a global innovation competition in 2015.

All the Tereos Starch and Sweeteners Europe sites have been awarded ISO 9001:2015 certification, specifying requirements in management. The Group’s EcoVadis score, rating its commitment to CSR, rose by 10%.

The Ambitions 2022 programme was rolled out across all sites to further improve the flexibility and optionality of our starch plants. Safety initiatives have been developed in the context of this programme which have already resulted in a significant decrease in the number of workplace accidents in comparison to 2017-2018.

3.8
million
tonnes of cereals processed

Starch and Sweeteners Europe
Starch and Sweeteners international

INDONESIA

The Cilegon plant continued its ramp-up, achieving record industrial performances with a 15% increase in the volume of corn processed to more than 300,000 tonnes, enabling to meet demand in a high growing domestic market. From this year, the company’s sales teams benefited from support of the Singapore technical centre to propose new corn-based formulations to customers in the cardboard industry.

BRAZIL

In 2018, the Group continued the improvement of industrial performance, resulting in a 13% increase in the volume of corn grinded. The year saw a big change with regard to cassava starch production as the installation was modified to expand the product range for human consumption in order to address this growing market.

This year, Tereos joined forces with Embrapa to develop new varieties of disease-resistant cassava with high starch content. The aim is to increase agricultural productivity by 30% and shorten the cassava cycle by six months.

CHINA

Tereos produces starch in two sites in China in partnership with Wilmar. The Dongguan facility increased its wheat starch production by nearly 50% compared to the previous year (120,000 tonnes) and its syrup, fructose and glucose production by 40% (190,000 tonnes). On the back of strong domestic demand, Tieling posted record results, grinding 846,000 tonnes of corn (up 9% on the previous year).

Export and distribution

Tereos Commodities marketed 1.4 million tonnes of sugar in over 60 countries on a highly competitive market, and increased its distribution of ethanol to 1.2 million m³ (16% higher than 2017-2018). The Group is now exporting to Asia and has developed its activities to the United States, with an ethanol that is certified for sustainability. Subsidiaries in Singapore and Vietnam, responsible for distributing a number of starches in Asia Pacific, saw a 40% increase in volumes. Meanwhile, Tereos expanded its presence in Africa, opening a new bureau in Nairobi.
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