
ACTIVITY REPORT

2018



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INFOGRAPHIC OF THE SECTOR

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Thierry Martin-Lassagne
President of the Board
of Directors



Hervé Domas
Managing Director

« We would like to thank Aliapur, its motivated teams and its hard-working service providers for pulling out all the stops this year to make sure no tyre stocks accumulated on its clients' premises »

COLLECTION TARGET EASILY BEATEN

Once again, the collection target assigned to Aliapur by its tyre-selling clients was not only attained, but easily beaten. In 2018, Aliapur dealt with 375,000 tonnes of tyres, or 16,000 tonnes more than initial orders, representing an excess of 4.6%, all funded by Aliapur's shareholders. Such figures are the result of dynamic analysis for tyre-sellers but also, as ever, of undeclared volumes. This problem will necessarily have to be dealt with upstream in the sector, without discouraging all those who pay their regulatory obligations unfailingly. Whatever the case, we would like to thank Aliapur, its motivated teams and its hard-working service providers for pulling out all the stops this year to make sure no tyre stocks accumulated on its clients' premises. Congratulations to one and all!

KEY FIGURE: 43

One figure is particularly eloquent: 43%. This is the increase in the number of recyclers working with Aliapur since 2016. Back then, there were 35, and now there are 61. This is the result of the diversification strategy that we committed to two years ago, as a means of decreasing the risk of dependency on a limited number of key players and destinations. The success of this approach has far exceeded our expectations, and we are sure that the trend will continue.

There is nevertheless one note of caution: the ever-increasing share of recycling abroad. 70% of the tyres collected are recycled outside of France (and 52% outside of Europe). Aliapur's aim is to not only restore balance but also, ultimately, to make it possible for 100% of tyres to find their second life in France. The dependency on exportation is not without risk, and it would not be reasonable to neglect this fact, particularly as it does not only concern the EPR tyre sector.

POWERGOM, TECHNIGOM AND GÉOGOM: 3 BRANDS FOR DEVELOPMENT.

All that remains in terms of recycling, is for Aliapur to continue its R&D work at a rapid pace. In this way, in material recycling, interesting possibilities are emerging: the technical stages are being completed slowly but surely, the first commercial operations are starting, and the range of products designed with Technigom is increasing, as can be seen on our new website. At the same time, the standard methods, such as synthetic turf, have returned to their 2017 level after the institutions that placed orders received reassurance, having been legitimately worried by certain crazy rumours.

The fuel, Powergom, has also played a role in the development of recycling methods in France. The idea of energy production that uses waste is making headway: the high heating value of tyres, their 27% of biomass and regular composition make them an SRF of the very best quality, interesting several industries that consume a lot of coal. Beyond authorising the project, it is now necessary for public policy to encourage their use.

And finally Géogom, Aliapur's most recent brand, which is a more than promising method. This solution is designed for public works, and it aims above all to use tyres as light embankment material. Géogom is a resource that is in abundant supply, cheap, resistant and easy to implement, and it should soon develop considerably.

Although we are not complacent about our excellent results, it is in all these directions that we intend to focus our efforts in 2019.



A NEW PRESIDENT



Thierry Martin-Lassagne is the Director of Public Affairs at Michelin France and a member of the Board at Aliapur. At the Board Meeting

on 20 June 2018, he was chosen to take over as President of Aliapur from Mark Thys, the Managing Director at Goodyear Dunlop Tires France. His mandate is for 2 years. The Aliapur team takes great pride in the unfailing involvement of its successive presidents in the sector's strategy, defending its interests and taking its operational, R&D and regulatory issues into account.

IN THE CATALOGUE



Aglostic, the anti-mosquito filter made from 85% Technigom and developed by the New Caledonia-based company, Aedes System, is finally making its appearance on mainland France. In 2018, it was included in the catalogue of the leader in pest control products, Edialux, which supplies the professional market. The Aedes filter clearly states its ecological and permanent nature. It is available in the category of "specific forms of pest control" against mosquitoes, and has a 10-year warranty.



TWO GO TO JEC WORLD

Bio-composite panels made from natural materials (basalt, linen, coconut fibres, bamboo) and recycled material (Technigom): this is what has been developed by the specialised research company Veso Concept and Aliapur. This successful collaboration encouraged the two partners to jointly attend JEC World, the leading international composites trade show, which was held in Paris in March 2018. There, they met with industrialists, researchers and buyers. To be continued, without a doubt.

UPDATE

On 12 December 2018 in Paris, French mayors, the Cercle National du Recyclage (national recycling group), Aliapur and FRP signed the new version of the *Charte de reprise des pneumatiques usagés en déchèteries* (Charter for recovering end-of-life tyres from landfill sites), which replaces the original charter that was ratified in October 2008. The first text laid down the rules for collecting end-of-life tyres from landfill sites. A decade later, the 2018 charter is based essentially on the regulatory modifications of 2015 meaning that all stocks in landfill sites can be dealt with.



WE WERE THERE!

Like every year, Aliapur's R&D department was present at several events of international range, including:

- 30 January, a day dedicated to applications for elastomers in the public works industry, organised at the CSTB in Nantes (public works applications and bio-composite panels).
- 20 March, the 9th annual Fedairsport congress, with a spotlight on rubber for sports surfaces made from Technigom, with its traceability and lack of health or environmental impact.
- 26 March, the congress devoted to PPRS (Pavement Preservation & Recycling Summit) bitumen, Asphalt Rubber 2018.
- 24 May, international Bioproof day, devoted to bio-sourced materials and recycled products for the rubber sector.
- 30 May to 1 June, Movin'on, the world summit for sustainable mobility in Montreal, during which Aliapur, present at the Michelin stand, was able to present the results of its OpenWaste hackathon, and in particular the winning project, Black Pillow.
- 10-11 October, the international congress devoted to the eco-plastics industry, organised by the French society of plastics engineers, for the presentation of innovative solutions combining bio-sourced materials and a recycled product (Technigom).



FOR DOWNLOAD

Every car industry professional that had tyres collected by the Aliapur sector at least once last year has received its *Environmental savings certificate* for 2018. The certificate can be downloaded from a professional account on Aliabase. Since 2013, this document converts the total weight of the tyres collected over the year into environmental benefits, that is, savings in water, electricity and diesel. In 2018, a total of 31,406 certificates were edited. It is becoming increasingly common to see them displayed in points of sale.

POWERADD



In 2017, Aliapur launched a media campaign targeting the international cement-making industry to promote tyre shred from the French sector as a premium alternative source of fuel. This campaign was repeated in 2018 with the official presentation of the brand product, Powergom, which refers exclusively to Aliapur's made-in-France shred. Powergom is exported to Spain, Switzerland, Sweden, Luxemburg, Turkey, India, Pakistan, Korea and Japan... although Aliapur would prefer it if the French market could absorb 100% of production!



THIS WAY OUT!

A decree by the French State Department for ecological transition dated 11 December 2018 and published in the Official Journal on 20 December outlined "the criteria for removing objects and chemical products, subject to processing with a view to re-use, from their status of waste". A dozen products are concerned under certain conditions, including end-of-life tyres. Thus, according to this decree, second-hand tyres have now officially become products that can have a second life in France or abroad, but only after verification and preparation by professionals.

OUR YEAR IN FIGURES 2018

CONSIDERABLE COLLECTIONS TO BE FINANCED

Financial aspects for Aliapur in 2018:

- Turnover in 2018, which underwent significant growth **(+10% compared to 2017)**, was the direct result of an increase in collections: 376,000 tonnes, or +7.5% compared to 2017. Added to this is other income from recycling, a result of new commercial opportunities.
- This increase in income has made it possible to fully cover the additional volumes (including the costs associated with the increase in the average weight of tyres), while preserving a net result of **291 k€**.

BALANCE SHEET (IN K€)

<u>Real estate</u>	<u>Income collected in advance</u>
492	411
<u>Other debts</u>	<u>Debts</u>
2,613	19,138
<u>Accounts receivable</u>	<u>Equity</u>
12,963	8,220
<u>Treasury</u>	<u>Provisions</u>
13,329	1,628
<u>ACTIVE</u>	<u>PASSIVE</u>
23,397	23,397

FINANCIAL RESULTS (IN K€)

	2018	2017
Turnover	60,590	55,025
Subcontracting	54,150	48,516
Gross operating surplus	6,440	6,509
Net income	292	329

THE SHAREHOLDERS AND THEIR REPRESENTATIVES ON THE BOARD OF DIRECTORS

Shareholders	Permanent representative on the board of Directors
Bridgestone France	Mr Benoît RAULIN Mrs Brigitte GBAGBA
Continental Holding France	Mrs Pascale WOITTEQUAND Mr Raf CLAES
Goodyear France	Mr Paul Henri LEPRETRE Mr Jean Denis PERCHE
Manufacture Française des Pneumatiques Michelin	Mr Pierre-Yves COMBY Mr Thierry MARTIN-LASSAGNE President of the Board of Directors
PNEUS PIRELLI	Mr Matthieu BRINON
PIRELLI TYRE SPA	Mr Grégory BARSI

DISTRIBUTION OF COSTS IN 2018 FOR €1.18*



* €1.18: eco-tax for a passenger car tyre in 2018

Non-operating expenses:

- Structural expenses were stable at around **6 M€**.
- After 2017, a year particularly rich in R&D "Open Innovation" (the OpenWaste hackathon), 2018 was devoted to continuing our brand strategy through specific innovations. The expenses were high - **614 k€**.
- 2018 was also marked by the deployment of several IT tools with, in particular, a software package to optimise our road map for flow management for a total cost of **65 k€**.
- **438 k€** were used for communication (+8%) notably in the context of the new website, as well as our participation in the composites trade show, JEC World.

KEY DATA



375,176
TONNES OF TYRES

...were collected by the Aliapur network in 2018. Among the car industry professionals, it was in **independent garages** that the volumes to be collected increased the most.

75%

of the volumes collected **passenger vehicle tyres**.



4.5 MILLION

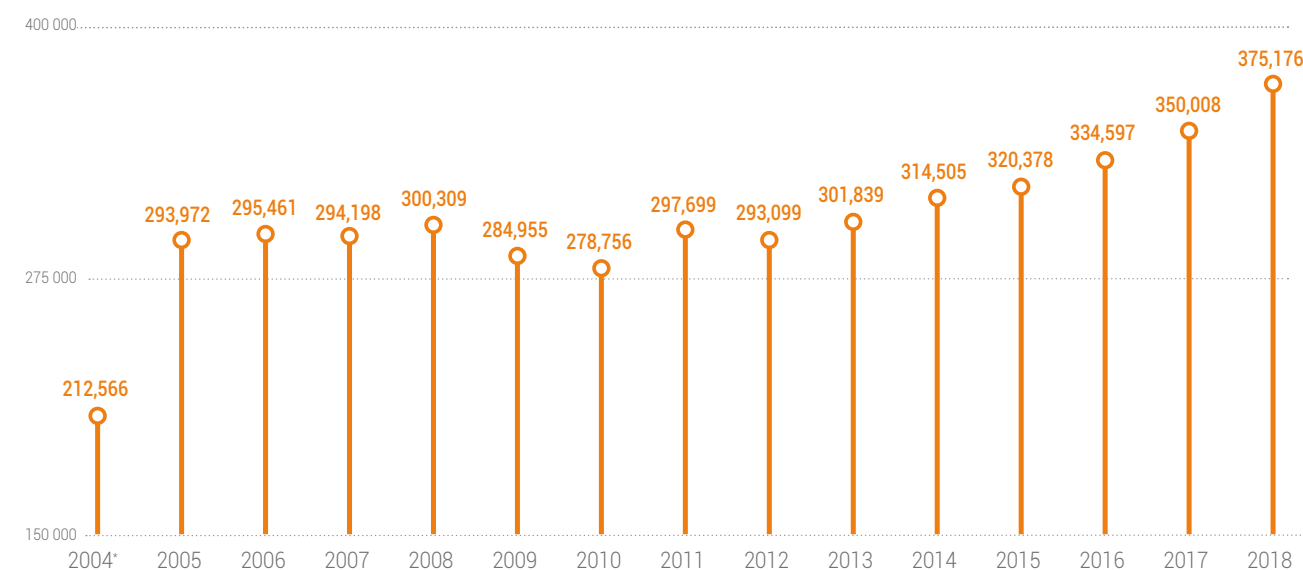
passenger vehicle tyres, that's what the 35,700 tonnes collected in **October 2018** represent. With collections totalling on average 30,000 tonnes a month (3.8 million passenger vehicle tyres), this is an **absolute monthly record**.



27 PER DAY

For the number of **requests to open an account** received by Aliapur throughout the year from car industry professionals wanting to set up collections by the sector..

EVOLUTION IN COLLECTIONS (IN TONNES)



* The operational activity of collecting end-of-life tyres in the Aliapur activity started on 1 March 2004. Aliapur thus made collections for 10 months in that year.

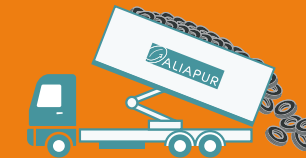
KEY DATA



47 MILLION
PASSENGER
VEHICLE TYRES

That is what the 375,176 tonnes collected in 2018 represent

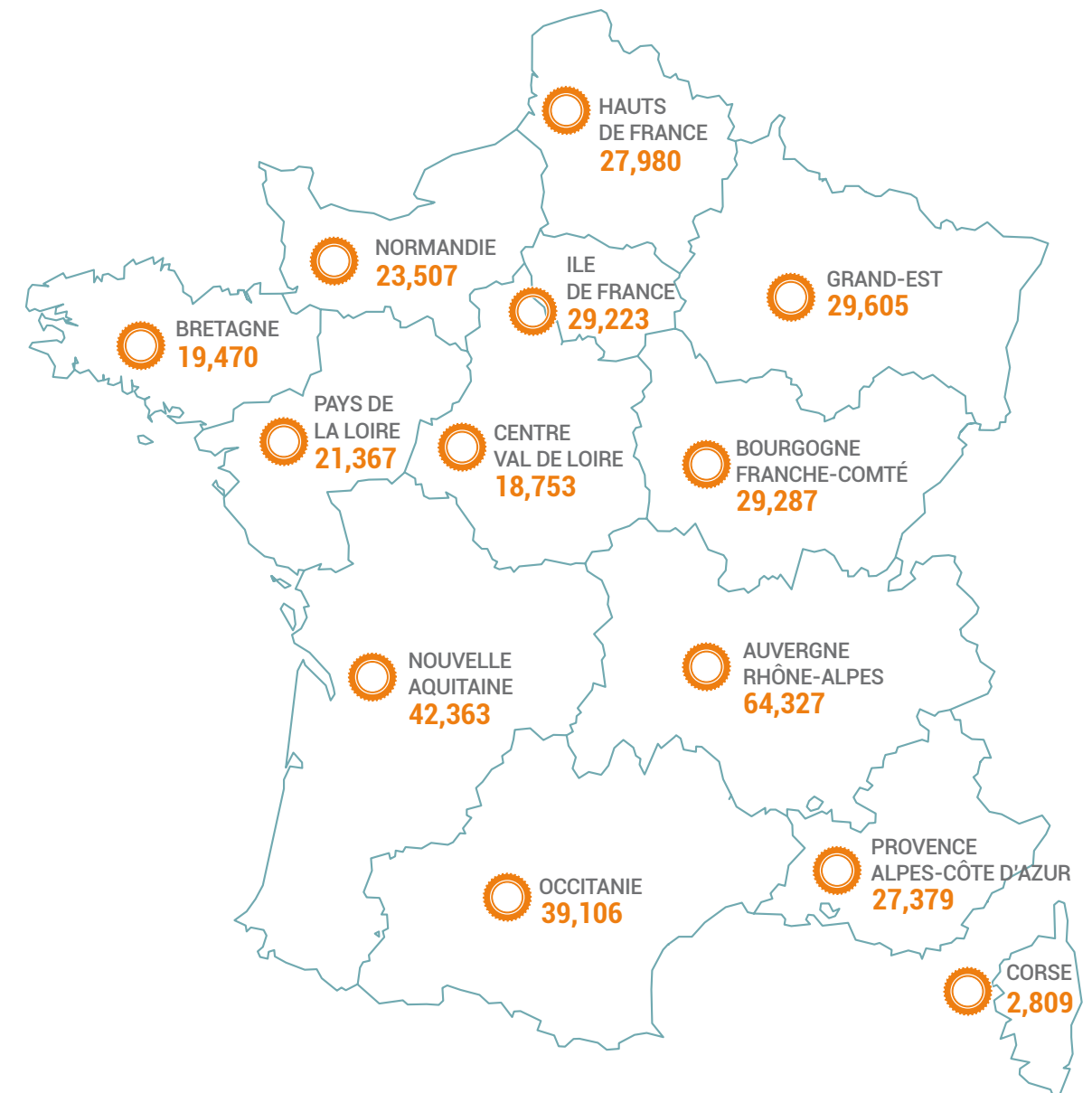
58% OF THE TYRES
ARE COLLECTED
FROM SKIPS



1 COLLECTION
PER MINUTE

That is what the
152,082 collection operations
in the year represent

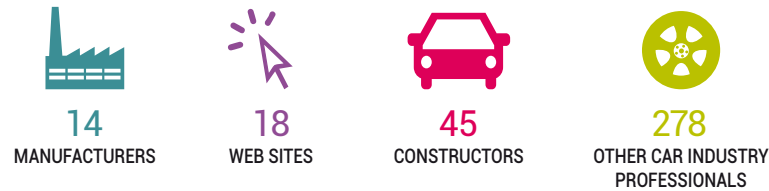
VOLUMES COLLECTED PER REGION (IN TONNES)



EVER-INCREASING NUMBERS OF CLIENTS

It is a regulatory obligation: every tyre sold in France must be declared, and then recovered or recycled at the end of its life in exchange for an eco-tax. Aliapur takes charge of this obligation on behalf of its clients, called *producers* by the legislator, and carries out the formalities for them. In 2018, 10 new producers joined Aliapur: 1 internet site, 4 constructors and 5 other car industry professionals who import tyres on to the French market. In total, 355 clients thus declared volumes that they had sold in France and paid the corresponding eco-tax.

 **355** CLIENTS



CONTRIBUTIONS PER TYPE OF TYRE

ALIAPUR CATEGORY	AVERAGE WEIGHT	TYPE OF TYRE	PRICE EXC. VAT 2019
A1 (3 to 5 kg)	4,06 kg	Motorbikes, quads, all tyres between 3 and 5 kg	€0.75
A2 (5 to 20 kg)	7,89 kg	Cars, 4x4, small utility vehicles, all tyres between 5 and 20 kg	€1.18
A3 (5 to 20 kg)	7,89 kg	Special tyres (resealable, equipped with additional features...) on the condition that they be easily identifiable during sorting	Price defined in relation to tyre specificities
B1 (20 to 80 kg)	53,99 kg	Utility vehicles, trucks, all tyres between 20 and 80 kg	€8.60
B2 (20 to 80 kg)	53,99 kg	Special tyres, (resealable, equipped with additional features...) on the condition that they be easily identifiable during sorting	Price defined in relation to tyre specificities
C1 (80 to 130 kg)	92,12 kg	Agricultural, civil engineering, public works, material handling	€19.50
C2 (130 to 200 kg)	161 kg	Agricultural, civil engineering, public works, material handling	€32.30
D1 (200 to 450 kg)	257,17 kg	Agricultural, civil engineering, public works, material handling	€54.15
D2 (more than 450 kg)	465 kg	Agricultural, civil engineering, public works, material handling	€101.65
E (less than 3 kg)	2 kg	Scooters, all tyres of less than 3 kg	€0.48
F1	Average 77 kg	Commercial airplanes	€17.10
F2	Average 6 kg	General airplanes	€1.45
F3	Average 16 kg	Military and regional airplanes	€3.15

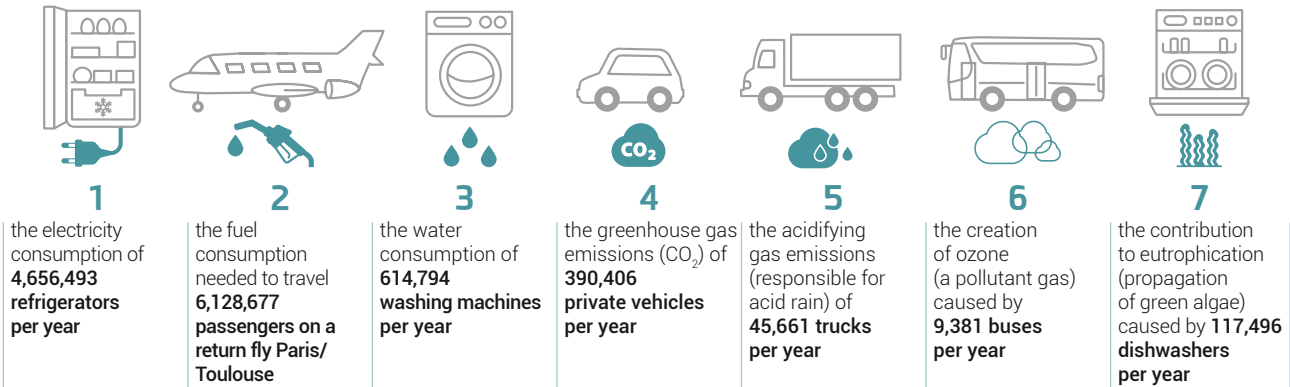


ENVIRONMENTAL ADDED VALUE 2018

Excluding re-use (second-hand and retreading), 346,698 tonnes of end-of-life tyres were recovered by Aliapur in 2018, or the equivalent of 43.7 million passenger vehicle tyres. The recovery of these tyres has made it possible to make savings in both natural resources and environmental impacts. The LCA of end-of-life tyres allows us to express these savings in terms of equivalences in the use of equipment and everyday activities.

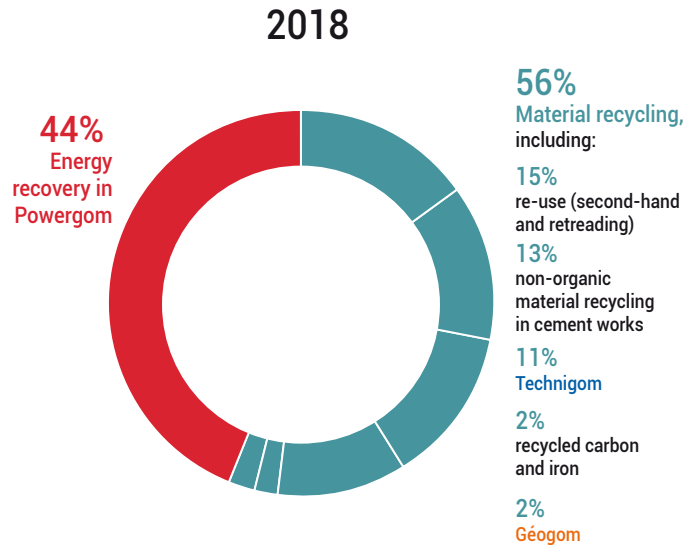


43.7 MILLION TYRES RECOVERED MAKE POSSIBLE SAVINGS OF:



- 1 - 235 liter, class A fridge-freezer
- 2 - Return flight Paris-Toulouse, 1,200 km in a medium-haul plane
- 3 - 5 kg, class A washing machine / 220 standard cycles per year / water consumption split between the standard 60°C «cotton» programme, full load / half-load and 40°C half-load
- 4 - vehicle emitting 130 g of CO₂ per year (target attained in France in 2010) and with annual kilometres of 12,000 km (average km travelled by a private individual in Europe)
- 5 - 16-32 tonne heavy-goods vehicle «euro 5» travelling 60,000 km per year
- 6 - average public transport type bus or coach travelling 38,000 km per year (average km in France)
- 7 - standard dishwasher (280 cycles per year) - no notion of class A because we only talk of the pollutants rejected by the washing water and cleaning products.

DISTRIBUTION OF RECYCLING METHODS



ALIAPUR.FR: A WEB SITE THAT IS (VERY) PRODUCT-ORIENTED AND (A LITTLE) CORPORATE



Aliapur's new web site, in both French and English, went on line in early 2019. Since 2016, the sector has intensified its policy to diversify its recovery and recycling solutions. With this in mind, it decided, during 2018, that it was necessary to have a web site that was open to the future of tyres – a showcase largely dedicated to applications and products. Everything has changed: the graphics, the ergonomics, browsing and the content. The uploading of the new site also coincided with the deployment of three brands « by Aliapur »: Technigom for rubber granulate, Powergom for the range of alternative fuel sources, and Géogom, the material specifically-designed for Public Works (see p.24-25).

The link with car industry professionals has been reworked. A specific page has been created for those who put new tyres on the market: they have direct access to all the regulatory and practical information that concerns them. Similarly, a specific area is reserved for those who store tyres, on the page *Getting your tyres collected*, with documents for download and operational animations (read more). Above all, this page offers a direct connection to the Aliabase application, which is used by professionals for managing their collection requests. It is also from this space that anyone storing tyres who wishes to make contact with the sector can make an online request to open an account.

24

This is the number of photos of the main operational aspects of the sector, in free access and downloadable mode from the new site's media library. The only obligation for those using the photos is that they indicate « photos Aliapur, DR » each time they use them.

20

...recycling methods are detailed in the tab, "products and applications". Some are traditional (cement works, synthetic turf...), while others are more recent (acoustic underlay, the paper industry...). An intuitive browser makes it possible to filter these applications by replacement material, sector of activity, or brand. Several additional applications are in preparation and will be put online in 2019.

THINGS TO READ AND WATCH

With the uploading of the new web site, Aliapur also made changes to its *Conditions for free collections from tyre storers* (French only). Respecting these few rules – which are all a question of good common sense – effectively makes it possible to continue guaranteeing car industry professionals that the service of collecting their tyres will remain free of charge. These changes also introduced the idea of "small mobile container", an intermediate solution between manual collections and collections from skips. This document can be consulted on line and downloaded. The main aspects of these *Conditions for free collections* are the subject of an animation.



STEP BY STEP

French professionals who would like to join the sector to have their tyres collected must start by requesting that an account be opened for them. This request can be made directly on line on the page "Getting your tyres collected". To make this procedure easier, Aliapur has made and uploaded a 4-minute animated online tutorial to guide professionals making the request through each step.

20



This is the number of videos and animations created by Aliapur and uploaded in the video library, classed in 4 categories: institutional and events, brands and applications, reports and interviews, and "visiting our service providers". This video library will regularly be added to. It should be noted that Aliapur's YouTube channel contains around sixty videos, available in both French and English.

OUR YEAR OF OPERATIONS

INVENTORIES TAKE TO THE SKIES

30 metres

This is the ideal altitude for a drone flying over transformation sites to take photos.

2 to 4 hours

This is the time it takes the photogrammetry software, connected to the drone, to produce an accurate cubic volume of the stocks of shred and tyres on a transformation site: it all depends on the actual height of the flight, the total surface area to be analysed, and thus the number of photos to be processed. Until 2014, inventories were carried out by exhaustively weighing the stocks: this partially disturbed operations of the sites and could take... up to 2 days!

After a test phase in 2017, annual inventories of volumes of tyres and shreds on the 12 transformation sites in the sector were carried out by a drone in 2018. This skill, which is internal to Aliapur, was submitted to obtain a certificate of aptitude issued by the *Direction générale de l'aviation civile* (French general directorate for civil aviation): piloting a professional drone has nothing to do with that of a leisure drone, and is closer to that of a microlight. Incidentally, most of the flights carried out for these inventories were the subject of a prior declaration to the same authority (the DGAC).

In practical terms, Aliapur's drone is equipped with a GPS that permanently geolocalises it, and a 4K (ultra-high definition) camera, itself connected to photogrammetry software. By compiling and analysing a series of photos – in two dimensions – this software is capable of producing the entire site in three dimensions. This makes it possible to obtain the cubic volume of the stocks of shred and whole tyres with an error rate of less than 2%.

To date, the French sector is the only one in Europe that has a professional drone at its disposition for its inventories. It should be noted that the Italian sector, Ecopneus, has requested Aliapur's expertise for a full-scale test on three Italian sites at the end of the year.



Company: Trigone

TWO DÉPARTEMENTS CHANGE COLLECTORS



Alpha Recyclage retrouve la filière

THINGS ARE MOVING AT TFM

TFM Sud, which covers collections in 4 administrative *départements* in the Provence-Alpes - Côte d'Azur region (04, 05, 06 and 83) left the Alpes-Maritimes in 2018 to settle in the Var, on a site it had built in Brignoles that is better adapted to its activity. The choice was motivated by closer proximity to the main road axes in the south east, greater mobility and thus greater efficacy on a day-to-day basis.

Two of France's administrative *départements* changed collector in 2018: the Haute-Marne (52, in the Grand Est region), following a common agreement with the previous collector, and the Orne (61, Normandy region), as the previous collector had been sold to a group that wanted to refocus its activities.

To guarantee the car industry professionals continuity of collections in these *départements*, Aliapur launched two calls for tender. The Orne market was attributed to Chrono Route Bretagne, which now makes collections from 5 *départements*. The Haute-Marne saw the arrival of a newcomer to the sector: Alpha Recyclage. This company has been a key figure in the collection and recycling of tyres since 1998 and was an Aliapur service provider in its first call for tender. Its presence in the sector is coherent with the strategy for openness and diversification in collectors, adopted in recent years.

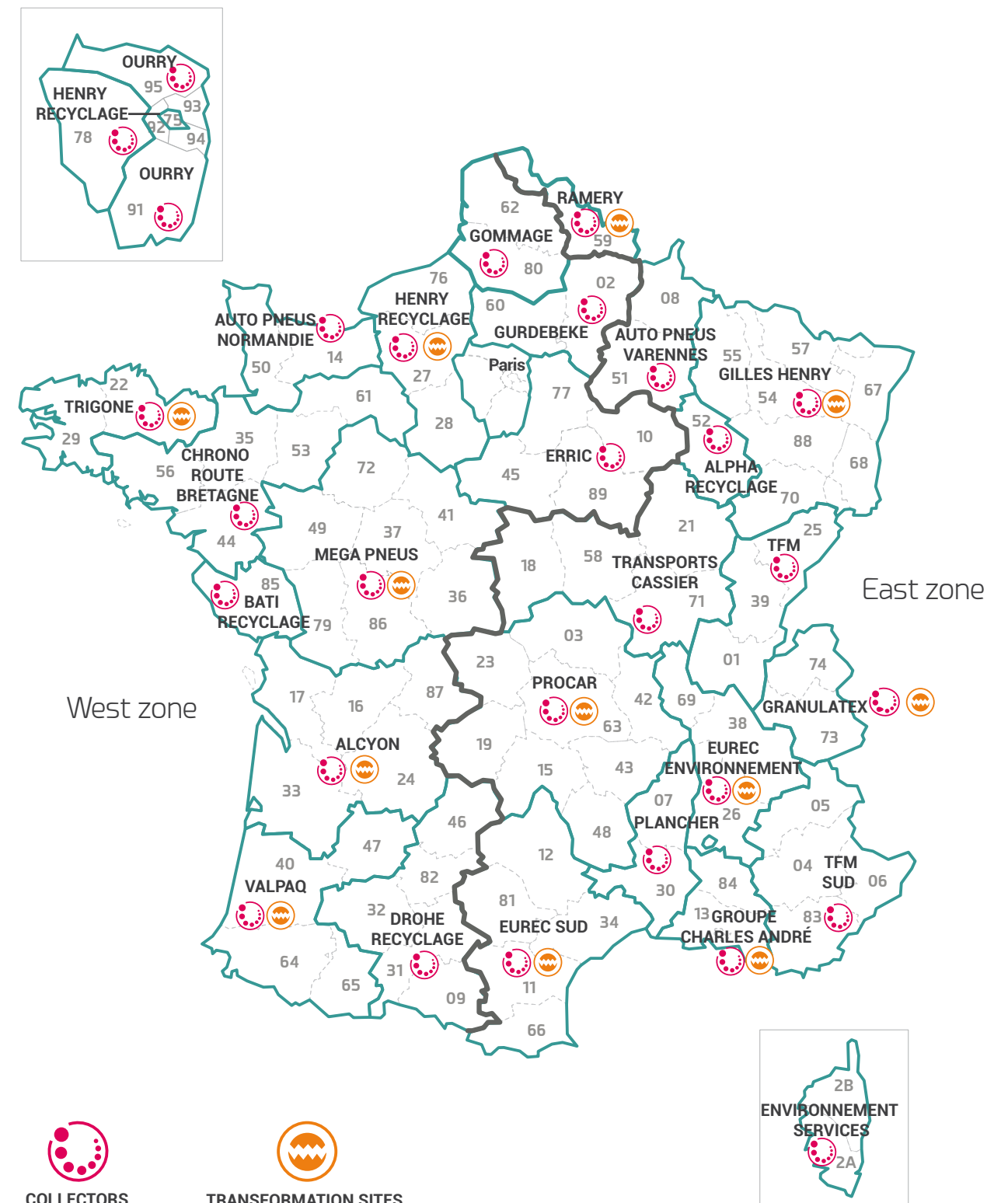
MULTI-SITE CERTIFICATION RENEWED FOR ALIAPUR

The Qualicert certification, which is issued by the organisation SGS and is required by Aliapur since 2005, is granted to "professionals from the tyre industry whose work procedures guarantee a good level of quality and traceability". Valorpneu is name trademarked by Qualicert and it groups together specifically the certification standards concerning the activities of collection and processing of end-of-life tyres.

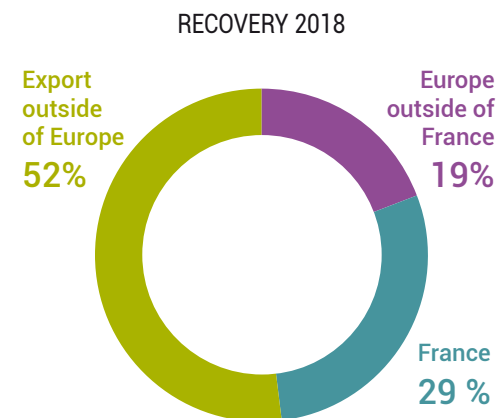
The obligations that collection companies must conform to in particular concern respecting the regulations and deadlines, the training and protection of staff, the storage conditions of the tyres, their sorting and traceability, as well as transparency in the procedures and quality of service. For transformation sites, there is also mastery of tyre shredding and processes leading to recycling.

Since 2013, Aliapur has passed an additional stage by obtaining SGS multi-site certification, which allows it to evaluate its service providers directly. This certification was renewed in 2018. Aliapur thus ensures their conformity with the standard qualities demanded by the sector, in respect of the requirements of specifications designed by and for the profession.

ALIAPUR SERVICE PROVIDERS 2017-2020

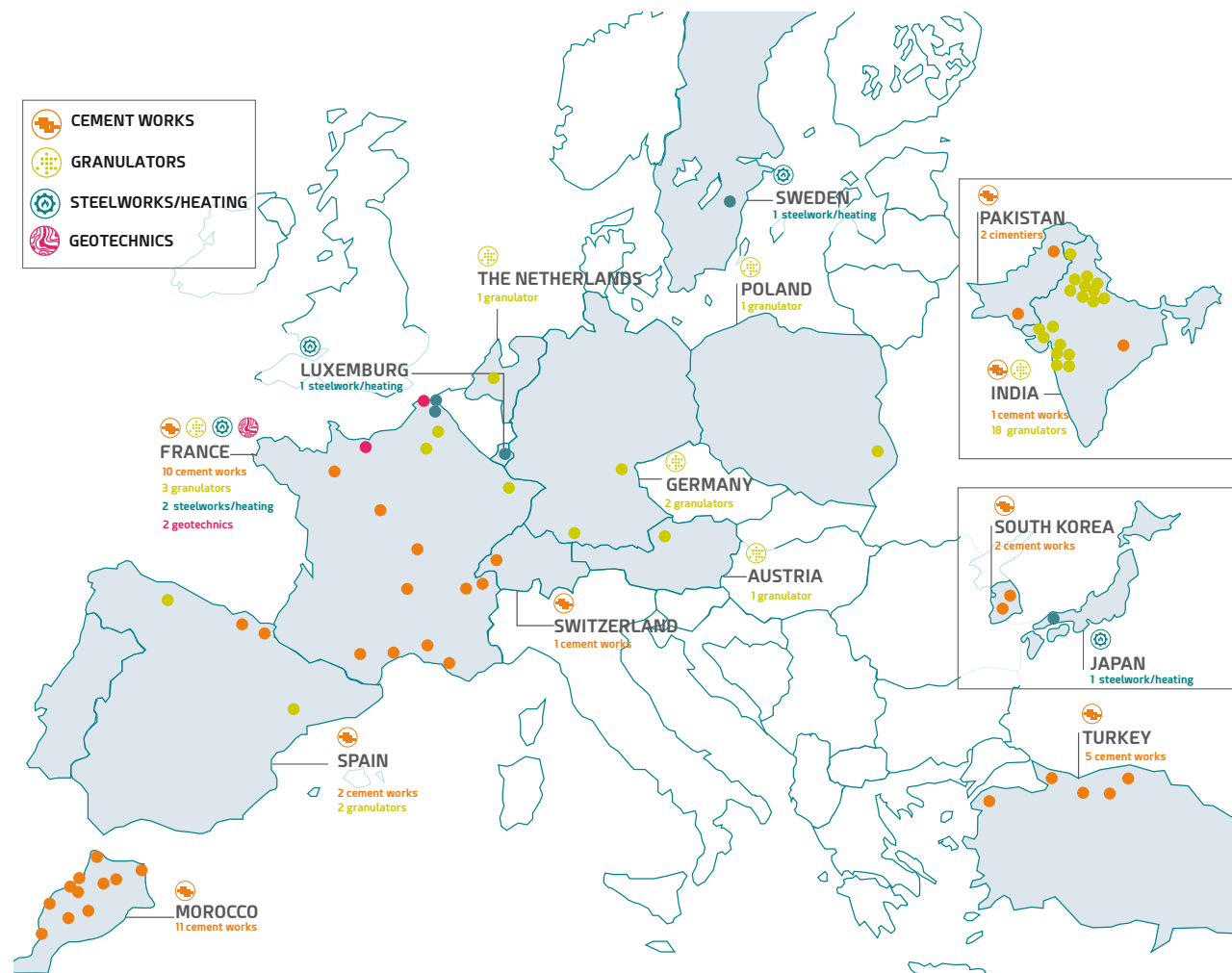


THE « MADE IN FRANCE » CONTINUES TO DO WELL ON EXPORT



Aliapur is keen to not rely too heavily on a single type of recycling or a single key player. Since 2016, Aliapur has thus maintained an offensive strategy of diversifying its recycling solutions. At present, this strategy is focusing mainly on the international market. Although Europe is a relatively stable market, with established public or private recycling sectors, the demand for *Made in France* is as strong as ever: Aliapur still delivers to Spain, Germany, Austria, Switzerland, Luxemburg, the Netherlands, Sweden and Poland. But it is outside of Europe that the demand has increased significantly in the last three years for the fuel Powergom and tyres destined for granulation. In addition to Morocco, the sector's traditional destination for 15 years, these recyclers are found in Turkey, India, Pakistan, Korea and Japan.

RECYCLERS UNDER CONTRACT TO ALIAPUR



2,000 CONTAINERS AT CRUISING SPEED

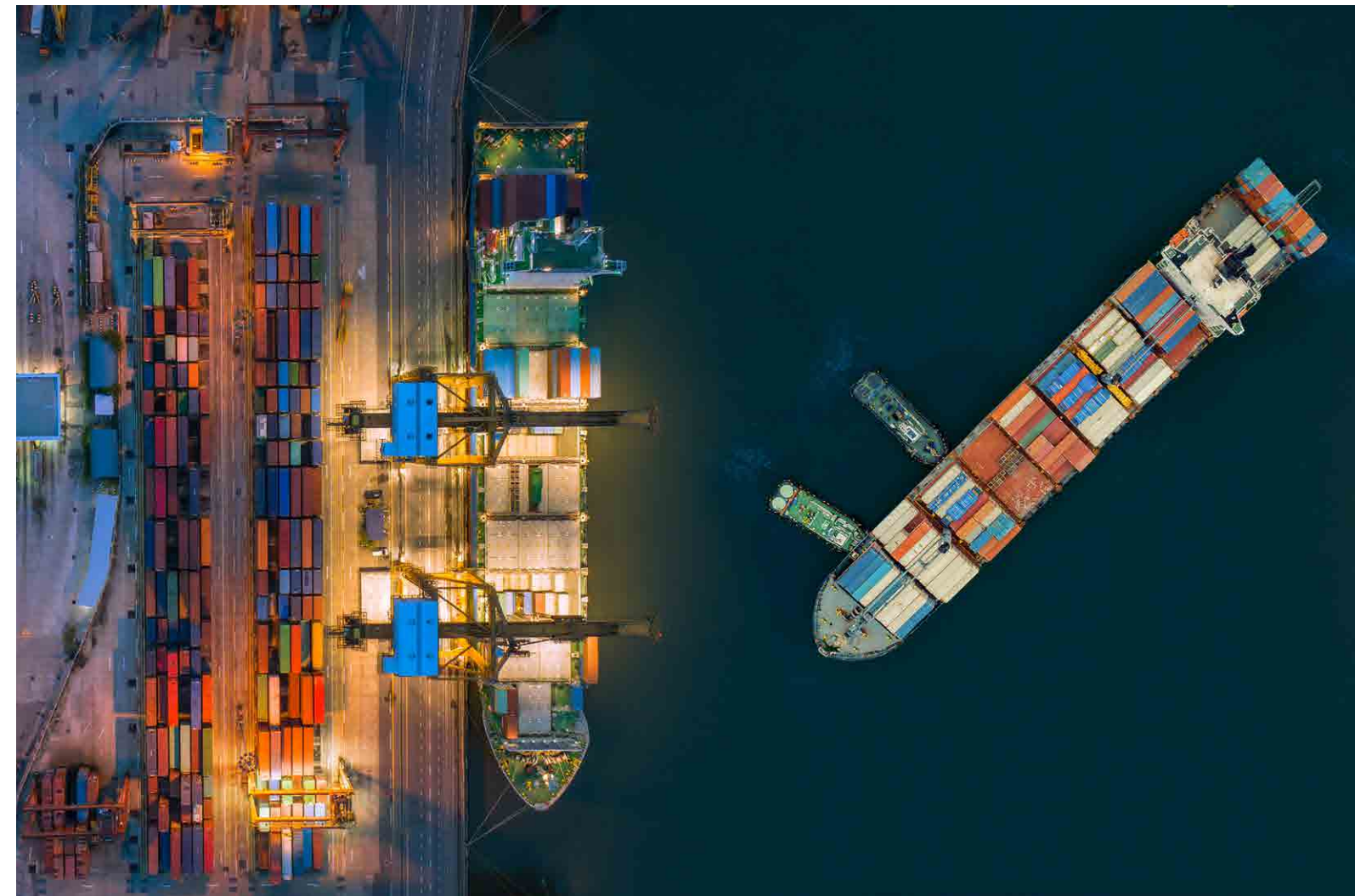
After a test phase in 2017, Aliapur sent 2,115 containers to India, Pakistan, Korea and Japan in 2018, representing a total volume of 56,000 tonnes of the fuel Powergom or tyres prepared for granulation. As containers are loaded from the back and not from above like the skips generally transported for Aliapur, several transformation sites have already equipped themselves with specific feed hoppers: Alcyon, Eurec Environnement, Henry Recyclage and Ramery.

404

This is the number of exclusive vessels sent out by Aliapur since 2004, including 37 in 2018 sent to Morocco, Turkey and Sweden. Only 2009 exceeded this figure, with 41 vessels.

6,079 TONNES

This is the largest volume ever entrusted by Aliapur to a single vessel. It was a load of Powergom shred destined for Turkey, and the vessel left Fos-sur-Mer on 11 December 2018.



OUR YEAR IN R&D



TYRE RUBBER AND PLASTIC: THE MIXTURE HAS GELLED (WELL)

Since the end of 2016, the collaboration project InPURPlast, scheduled for 30 months, aims to “develop compounds on plastic bases that integrate tyre crumb for direct use”. This effectively means providing industrialists with blends of tyre rubber and plastic (polyethylene and polypropylene) that are ready-to-use, for use through hot forming: rotomoulding, injection, extrusion, thermoforming, etc.

After a test phase on machines in 2017, these four manufacturing techniques received large scale validation in 2018 on industrial and semi-industrial production lines using blends composed of more or less tyre crumb. Aliapur has thus had series of pots for gardeners produced. The items manufactured with 70% of tyre and just 30% of plastic were shown to be perfectly usable for commercial outlets. They are above all much cheaper than pots manufactured exclusively from plastic, and use less fossil fuel.



Several trials are still in progress: the InPURPlast project is scheduled to be completed in the first half of 2019.

RUBBER IN THE ROAD, HOW DOES THAT WORK?



Since September 2018, Aliapur and the Ademe have equally shared funding of the doctoral thesis of Yasmina Mahmoudi, a research student at the Ecole nationale des travaux publics de l'Etat (French national school for State-funded public works, ENTPE, Vaulx-en-Velin). This thesis is being carried out with the industrial support of Eiffage and will be prepared over 3 years. The subject is “The thermomechanical behaviour of asphalt concrete containing rubber granulate obtained by recycling end-of-life tyres” (*Comportement thermomécanique d'enrobés bitumineux contenant des granulats de caoutchouc issus du recyclage de pneumatiques usages*). Adding tyre rubber to asphalt has certainly been done before in the last thirty years. But what was lacking was exhausting understanding of the influence of this rubber on the mechanical properties of the road surface, and the behaviour of the road surface over time. What happens, why, how and what are the consequences? These are all questions that the young researcher is going to use to provide full, detailed answers, with the ultimate ambition of making it possible to improve the quantity of recycled end-of-life tyres used by the road industry. Clearly a subject to keep an eye on...

TECHNIGOM, POWERGOM, GÉOGOM: BRANDS FOR A NEW MODEL



99.3%

This is Technigom's degree of purity, once the textiles and wires have been removed



30%

There is up to 30% of natural rubber from rubber trees in Powergom, making it a bio-sourced fuel



85%

Géogom is up to 85% cheaper than the other solutions used in public works (gravelly soil, polystyrene, etc.)

For 15 years, Aliapur has dealt with tyres collected exclusively by its authorised service providers from car industry professionals. These tyres, which are certified to be 100% French origin, come from premium manufacturers in 95% of cases, and are on average five years old. They can be traced from their entry into the Aliapur sector, and throughout the process that will take them to their second life.

Every year, Aliapur thus processes 47 million tyres. One in six returns to the roads through the second-hand market; but 85% of these tyres are transformed, essentially into shred and granulate. They can thus be used to replace raw materials, of either fossil or manufactured origin, but always costly.

PERMANENT WORKSON THE QUALITY OF THE PRODUCTS

At Aliapur, the R&D department works permanently on the quality of the products obtained from tyres, particularly their characterisation and standardisation. In total, 18 French standards (AFNOR) and 7 European standards have been published.

In parallel, Visiopur has been conceived as a measurement system and control tool developed specifically for the sector and installed at all transformation sites. This analysis software, combined with a light box, makes it possible to continuously verify the quality of the shred, including for shred designed to be granulated afterwards.

Aliapur is constantly in search of excellence, and, as each recycling solution requires tyres of a particular quality, the company has decided to differentiate its products clearly: in 2018, three brands were created, as guarantees of the quality of the products in the French sector.

3 INDUSTRIALISTS PRODUCE TECHNIGOM GRANULATE

Thus, at the start of the year at the JEC World composites show, our rubber granulate Technigom was launched. At present, only 3 industrialists have been authorised by Aliapur to produce Technigom granulate. This product favourably replaces the plastics and rubber obtained from petrol. In the second half of the year we launched Powergom, our made-to-measure shred for cement works and industries with high energy consumption. This premium made in France SRF with high carbon content is used instead of coal and petroleum coke.

The third brand, Géogom, was created at the end of the year for tyres specifically designed for public works. Géogom is made-to-measure depending on the work to be carried out: its intrinsic qualities – lightness, resilience, pest resistance and rot resistance – all make it a product capable of beneficially replacing materials that are heavier or more costly. It will be rolled out progressively from 2019.



3 MOTION VIDEOS,

for Technigom, Powergom and Géogom, have been created and published on the Aliapur site: in 90 seconds, they go straight to the point regarding the advantages and applications of each brand.

Technigom is used in public works, industry, sports and leisure

Acoustic screens
Anti-mosquito filtration
Anti-vibration mats
Athletics track
Bio composites
Conveyor wheels
Equestrian floors
Fitness mats
Indoor sports surfaces
Insulation underlay
Plastic compounds
Play areas
Rack protections
Rail support
Road surfacing
Synthetic turf
Urban furniture
Urban signage

Powergom is used in industry and energy

Cement works
Foundries
Industrial heating
Paper industry
Steelworks
Urban heating

Géogom is used in public works
Light embankment
Quarries
Retaining walls
Retention basins

POWERGOM, MORE EFFICIENT AND LESS EXPENSIVE THAN COAL

Since the 1970s, the cement industry has understood that tyre shred is a fuel source that is as efficient as coal, and above all less expensive: in 15 years, demand for shred in the French sector has continued to grow, even more since Aliapur has started proposing Powergom, an alternative fuel with made-to-measure sizes, and that is both standardised and subject to permanent quality controls. But rather than exporting it, Aliapur would like to recycle its Powergom in France. In 2017, the company thus appointed the consulting firm, Deloitte, to draw up a map of all the sectors of activity that consume fossil fuels and that also import coal. The map was submitted in the spring of 2018, and this exhaustive, quantified national study identified the industries in which Powergom could

13.5 MILLION TONNES*
Annual French imports of coal and its solid derivatives for domestic consumption

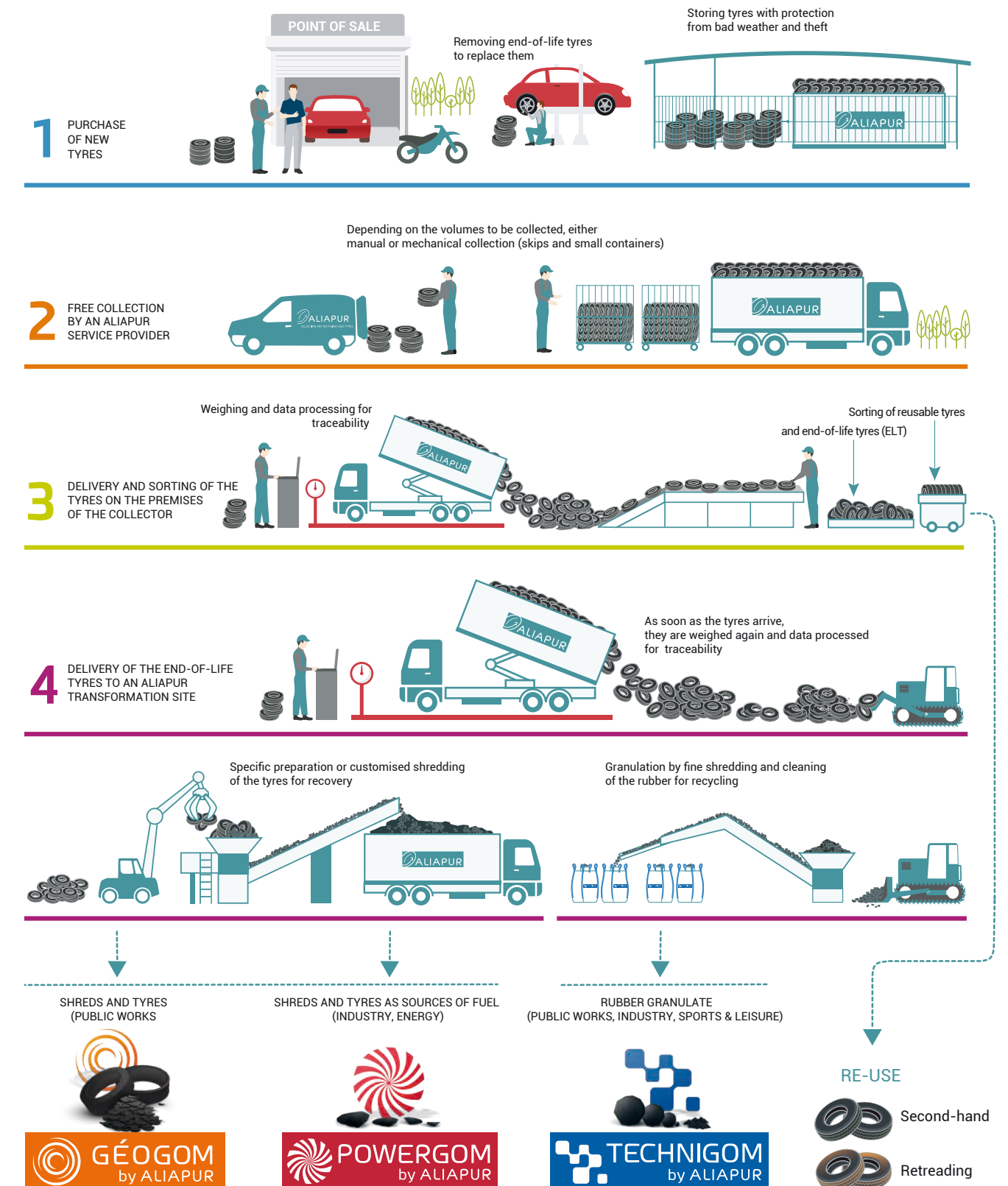
*Eurostat 2015

advantageously replace coal. There were many sectors potentially concerned, but three were retained by Aliapur, which validated the technical feasibility, taking into account the specificities of the processes in each industry. Powergom has a more than legitimate role to play in electric steelworks, with the particularity of providing input of material, as it can replace anthracite. This technology has already been proven by Aliapur, which supplies 3 steelworks, including one since 2004. There is no surprise either for urban and industrial heating plants, as the French company has supplied a boiler room in Sweden since 2008. What remain are the French heating plants, which are still taking their time to envisage tyres as fuel. However, Powergom is a local product, and it is in abundant supply, cheap and effective. On the contrary, coal is a fossil fuel whose reserves are running out. Above all, coal is extremely expensive to extract from the other side of the world, meaning that CO₂ emissions during its transport are extremely high. Aliapur hopes that the need to protect the environment, save natural resources, and recycle better while paying less to heat ourselves will all help municipalities and industrialists to take the plunge.

110%
The heat value of Powergom compared to that of coal



RECYCLING TYRES: HOW DOES IT WORK?





terrains de sport synthétiques

CHOISISSEZ LE MEILLEUR

Technigom, le granulat haut de gamme certifié origine France

Selon l'ANSES (Agence Nationale de Sécurité sanitaire de l'alimentation, de l'Environnement et du travail), les études disponibles à ce jour montrent que les terrains synthétiques utilisant des matériaux issus de la valorisation de pneumatiques usagés n'engendrent pas de risques préoccupants pour la santé des sportifs, des enfants et des professionnels de pose et d'entretien. *

L'éco-organisme Aliapur, leader français du recyclage des pneus, garantit avec les industriels de la filière, un granulat haut de gamme, économique et écologique. Alors vous aussi exigez Technigom !

* note scientifique et technique de l'ANSES du 29 août 2018 sur les éventuels risques liés à l'emploi de matériaux issus de la valorisation des pneumatiques usagés dans les terrains de sport synthétiques et usages similaires.



EXIGEZ
UN REMPLISSAGE EN
TECHNIGOM

—
dans le cahier des charges de vos futurs terrains de sport synthétiques