



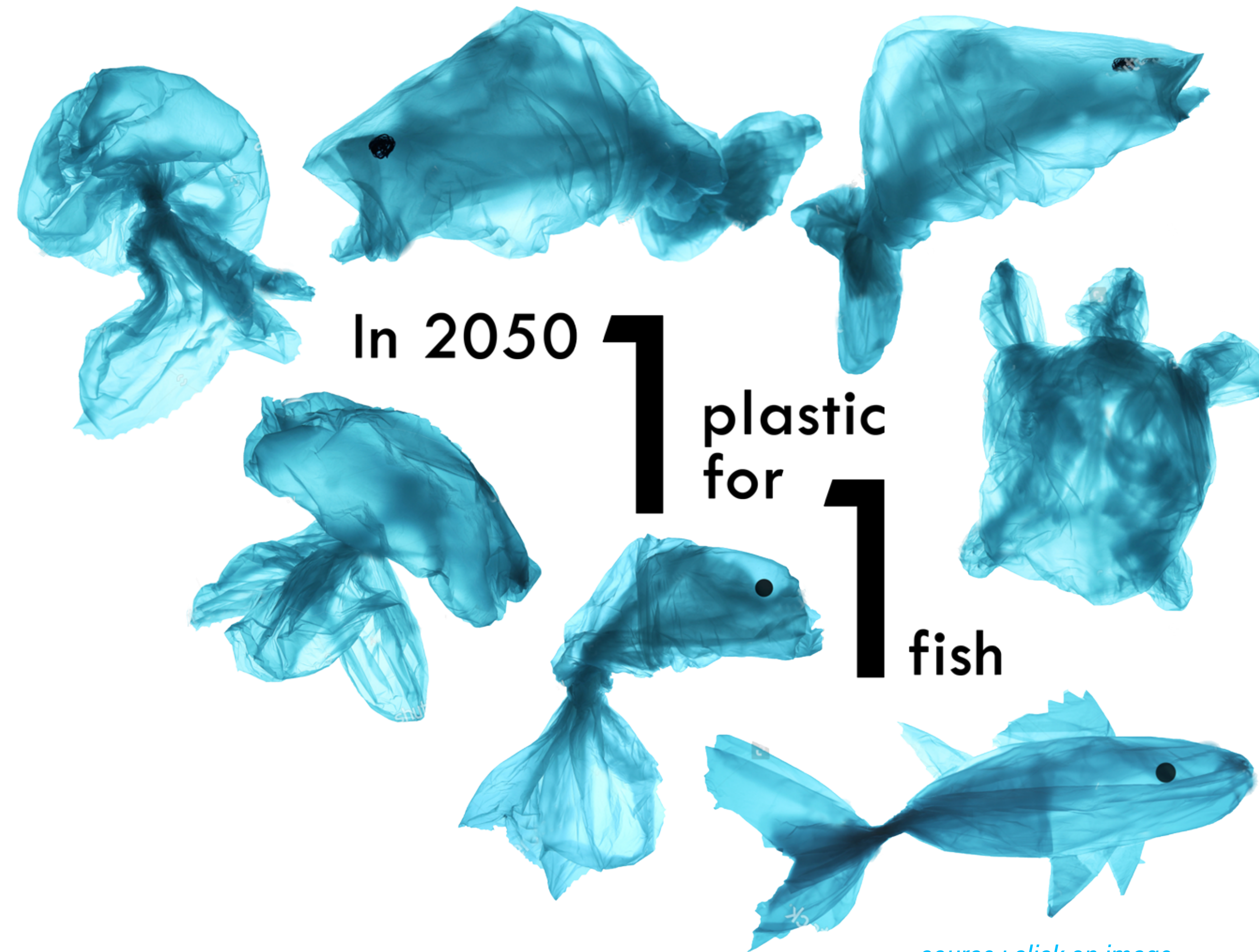
raxas : [raksas] irregual verb in Wolof (Senegalese)

1. to **clean** *raxas géej* (to clean the sea), **to wash** *raxas ruuf* (to wash the earth)

2. raxas album title by Youssou N'Dour [Bercy 2017]

Concept Note 2021

PLASTIC



source : click on image

WHY RAXAS ?



source : [click on image](#)

25%
of all fish contain plastic

Raxas is a new company fully committed to the preservation of the environment.

Among the many issues facing our eco-system, Raxas is interested in the sensitive subject of plastics.

Plastics are waste from an industrial point of view, but pollutants from a biological point of view. Unlike CO₂, which is fully integrated into the biosphere, plastics are not part of the biological chain.

So, rather than being biodegraded over time, they remain in the environment, particularly in the form of particles.

And they are now found almost everywhere: in the atmosphere, in the oceans, even in all living organisms.

([25% of all fish contain plastic particles](#))

WHY RAXAS ?



79%
**buried in landfills
or thrown in nature**

**12% incinerated
9% recycled**

[source : click on image](#)

Their negative impact on biological life is now recognised as a major public health problem.

[\(National Assembly, report 2483 of 04/12/2019\)](#)

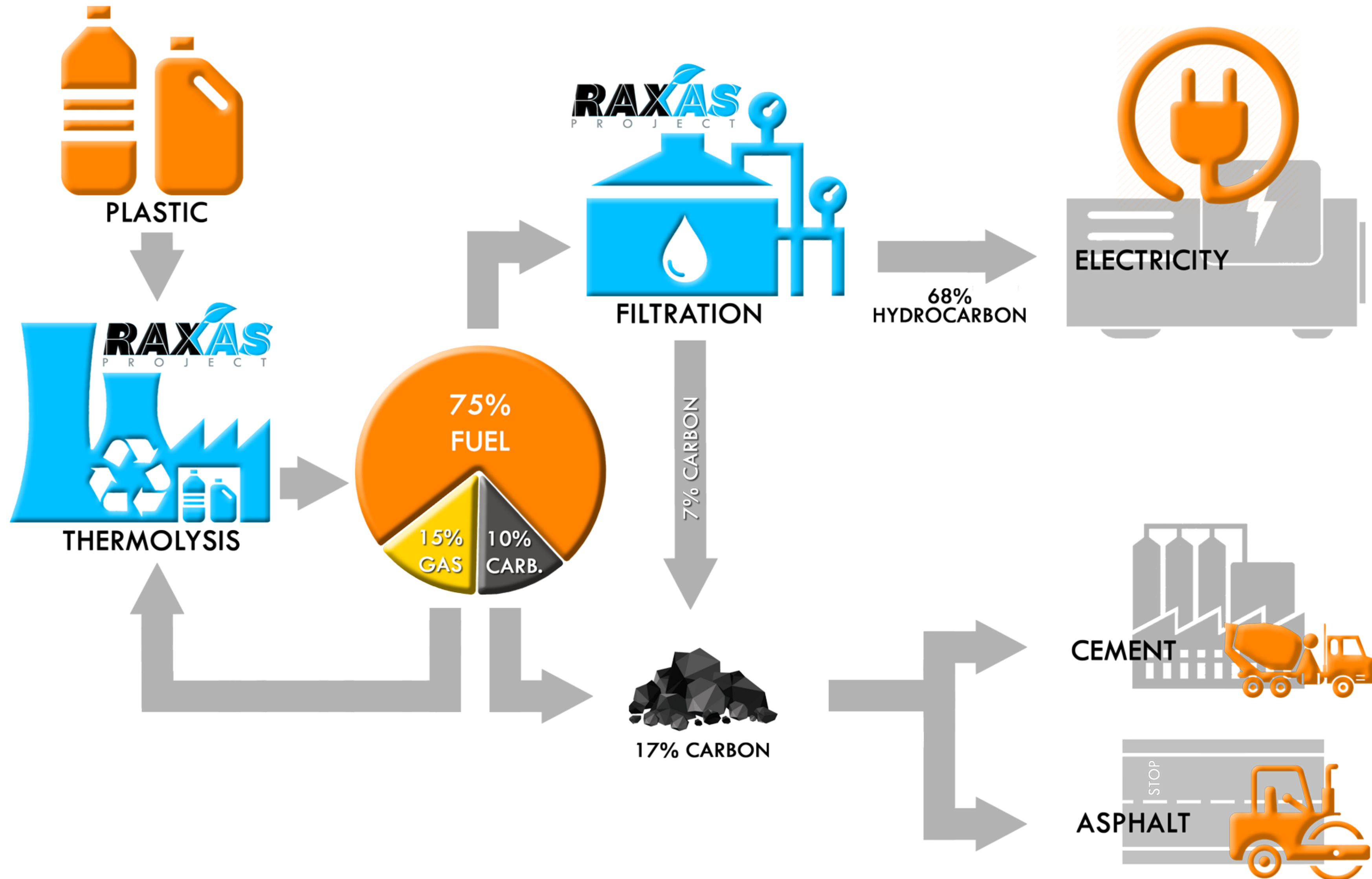
Since 1950, 79% of plastics have been thrown directly into nature and 12% are incinerated. [Only 9% is recycled.](#)

It is therefore crucial and urgent to provide solutions to this problem, which is the reason for the existence of Raxas.

Latest legislation on plastics:

- EU: since 01/01/2021, obligation to control the fate of plastics, including those exported.
- China: since 2018, ban on importing plastics (importer of 45% of plastics until then)

TECHNOLOGICAL CONCEPT, RECYCLING AND ENERGY PRODUCTION



TECHNOLOGICAL CONCEPT, RECYCLING AND ENERGY PRODUCTION

The plastic recycling technology on which the Raxas project is based is known and mastered: thermolysis.

It concerns all kinds of plastics, except PET/PVC.

This process uses high heat in the absence of oxygen and produces fuel oil (75%), gas (15%) and carbon (10%), but no CO₂.

These materials are then used to :

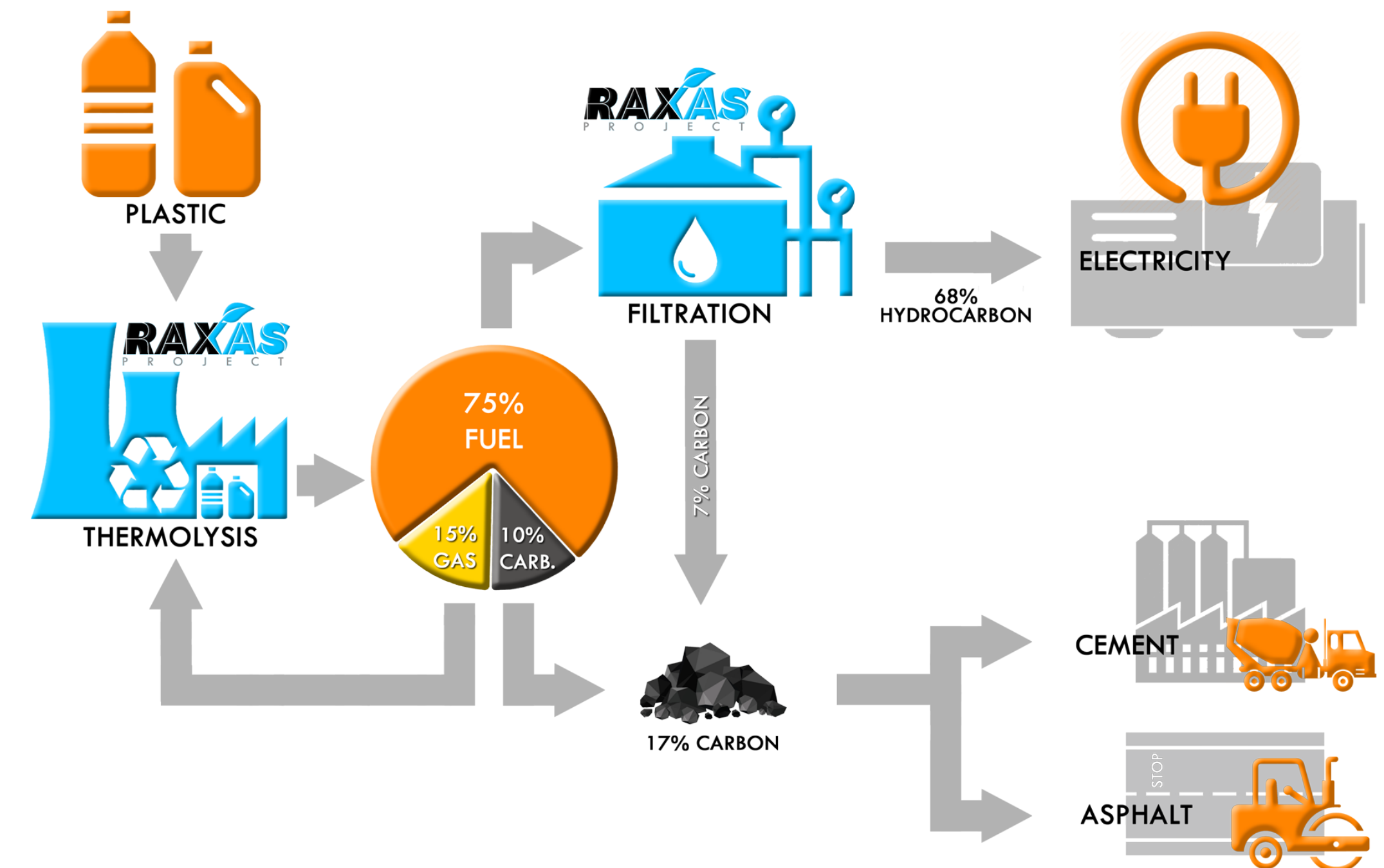
- produce electricity which is fed into the national grid (oil),
- supply energy for thermolysis (gas),
- manufacture cement and asphalt (carbon).

The thermolysis itself is carried out in a production unit.



Huayin thermolysis unit

Certifications : ISO 14001, ISO 9001, CE, SGS, BV, TUV, PATENTS



INITIAL PROJECT IN SENEGAL

The issue of plastics is global.

However, while all countries produce plastics, the West has the means to treat some of it and exports the rest to emerging countries, particularly in Africa.

But these countries have neither the technology nor the finance to deal with the problem.

We consider that it is our duty to act as a priority in their favour.

This means providing the initial investments that will enable us to "start the machine" and set up a virtuous circle.

The first step is to build a pilot unit that will show the relevance of the economic model (3 years).

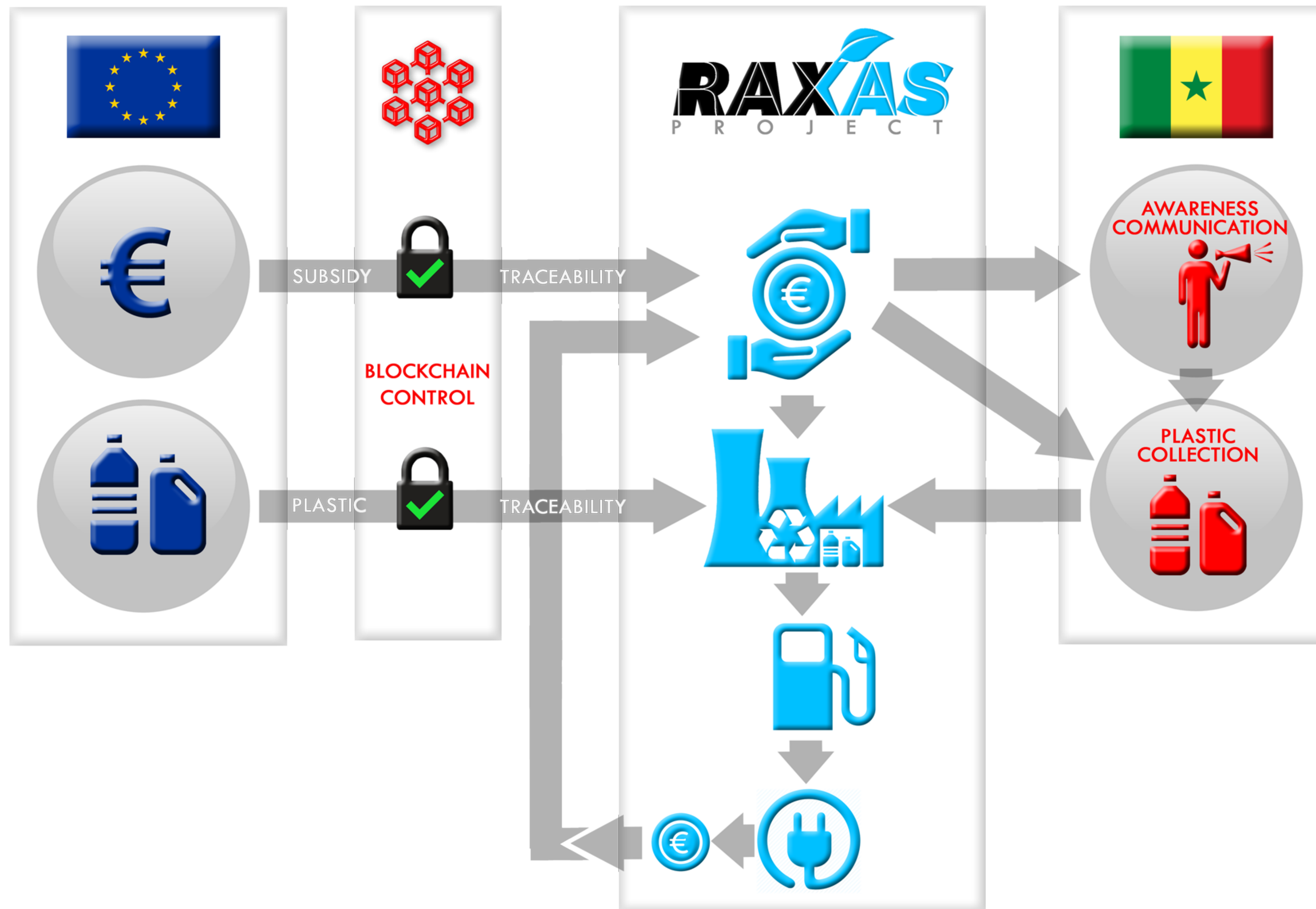
We have chosen Senegal for several reasons:

- it is one of the most stable countries in Africa with an international port and a well-developed road infrastructure,
- it is one of the African countries with the highest plastic emission into the environment,
- Senegal does not know how to meet its own energy needs, to which Raxas provides a direct response,

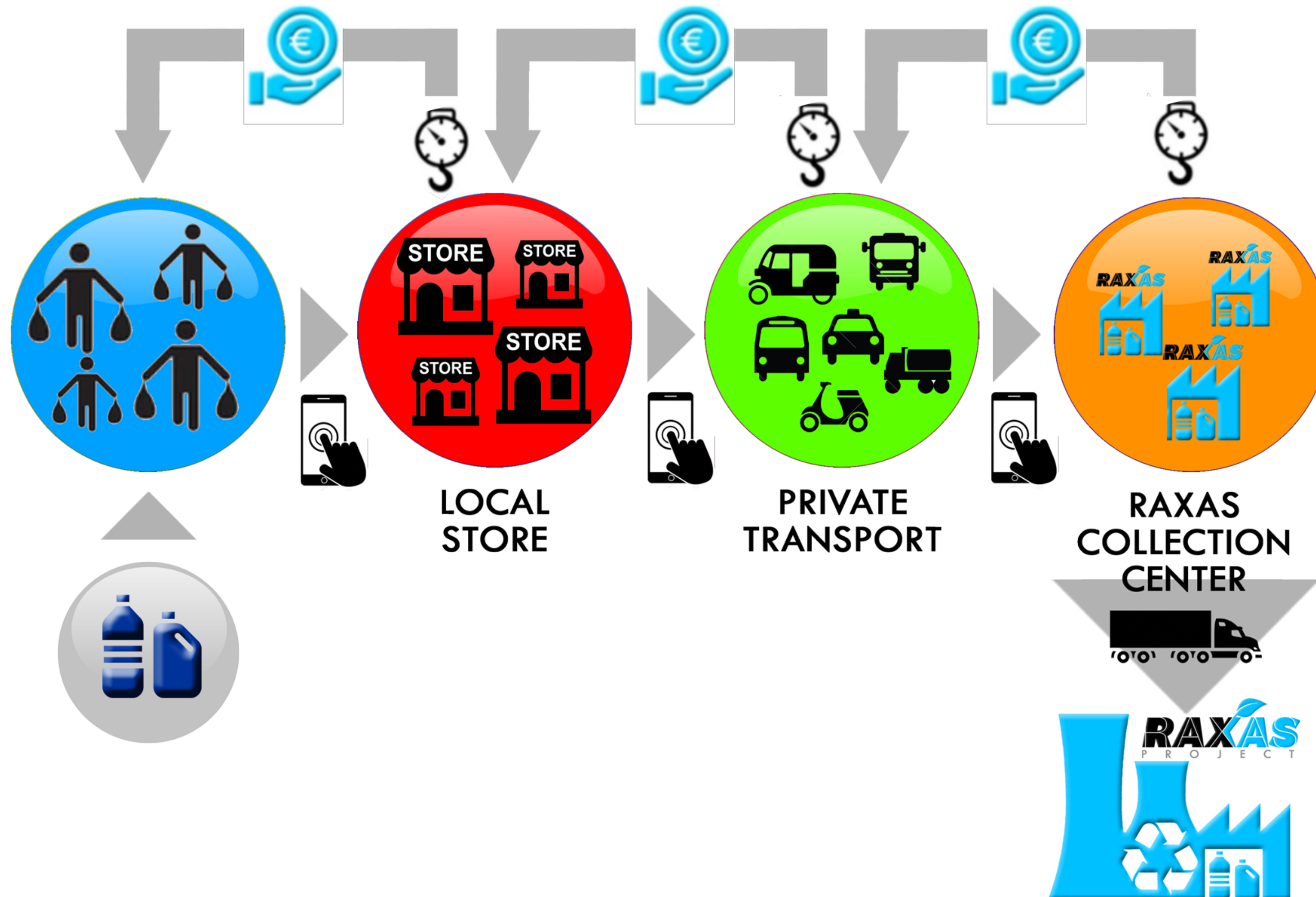
The next step will be the progressive multiplication of Raxas centres throughout the world, in areas ready to host them.



BUSINESS MODEL



HUMAN BLOCKCHAIN COLLECTION



BUSINESS MODEL AND HUMAN BLOCKCHAIN COLLECTION

The business model we follow is evolving over time:

Stage 1 - Raxas recovers plastic waste from rich countries* for a fee (200€ / ton) and processes it to make electricity for the local market.

This process is subject to a traceability system that guarantees its transparency from one end of the chain to the other with the institutions (blockchain technology).

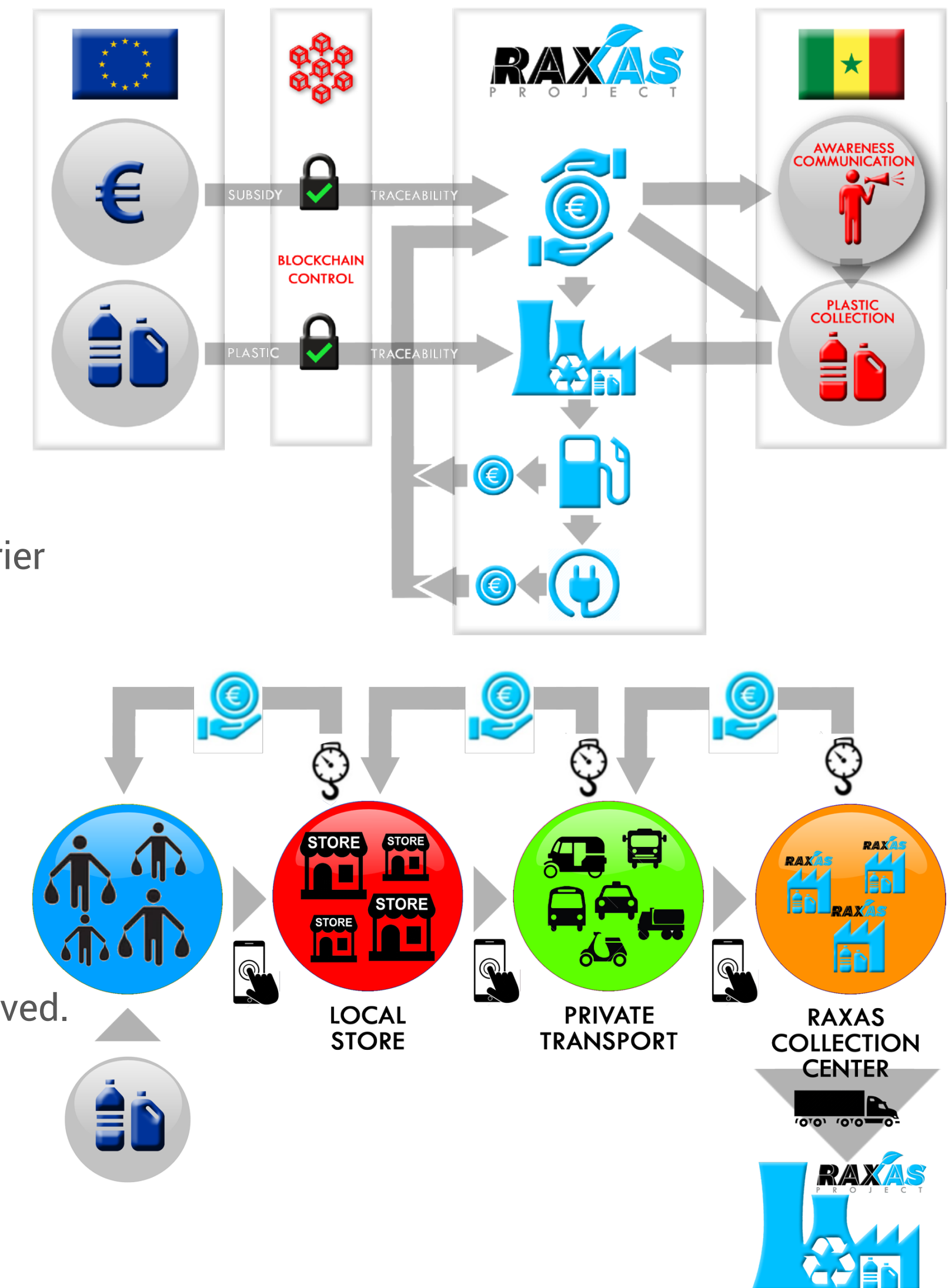
Step 2 - The benefits enable the establishment of a local plastics collection network.

This network is a chain made up of collectors (individuals collecting plastics scattered in nature), collectors (physical points collecting the catches of the collectors - e.g. Wari points in Senegal) and forwarders (any carrier transporting the plastics from the collectors to the Raxas collection points).

This network follows the economic model of the human blockchain since:

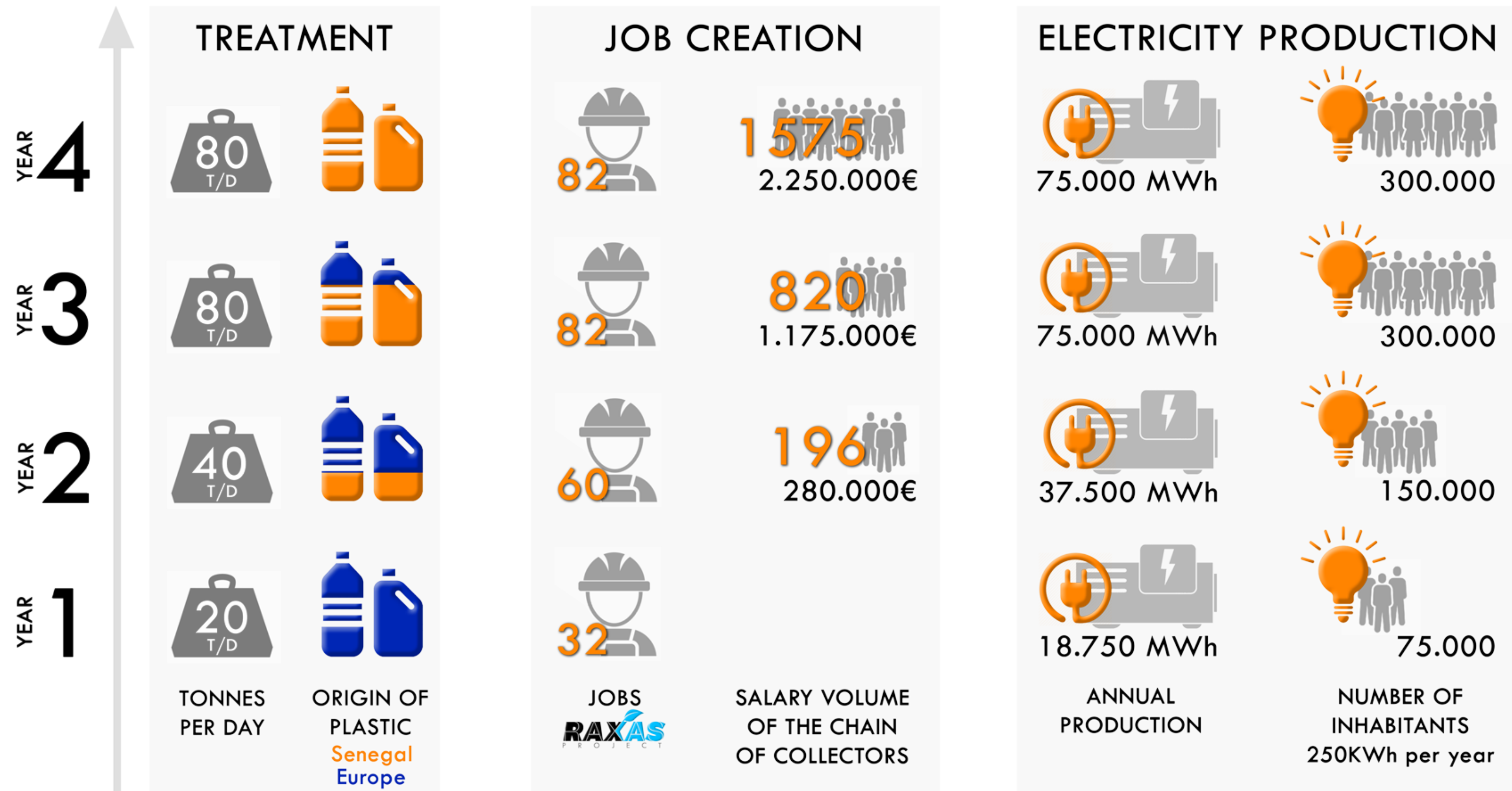
- we take advantage of existing networks: [Recuplast collection points](#), [Wari points](#), [transporters](#) (fast buses, bush taxis, bush buses, etc.)
- a mobile application coordinates everything, putting each participant in contact with the next, and each participant is paid for his or her participation by the next.

Step 3 - As soon as the network is in place, local plastics are treated as a priority until total autonomy is achieved.



*: The EU exports 700 million tonnes of plastics per year to third countries (Middle East, Asia, Africa)

CREATION OF LOCAL ELECTRICITY AND JOBS



CREATION OF LOCAL JOBS AND ELECTRICITY

Jobs and payroll:

Raxas is a project that generates internal jobs: engineers, chemists, mechanics, workers, etc.

In year 3, the number of these jobs is 82.

Raxas is also a project that pays all those involved in collection: collectors, collection point managers, transporters.

The salary volume corresponds to the total amount dedicated to the annual remuneration of all participants in the project, both internal and external to Raxas.

For most of them, this represents a supplement to their salary, for others it is their main income.

The average monthly salary in Senegal is 130€.

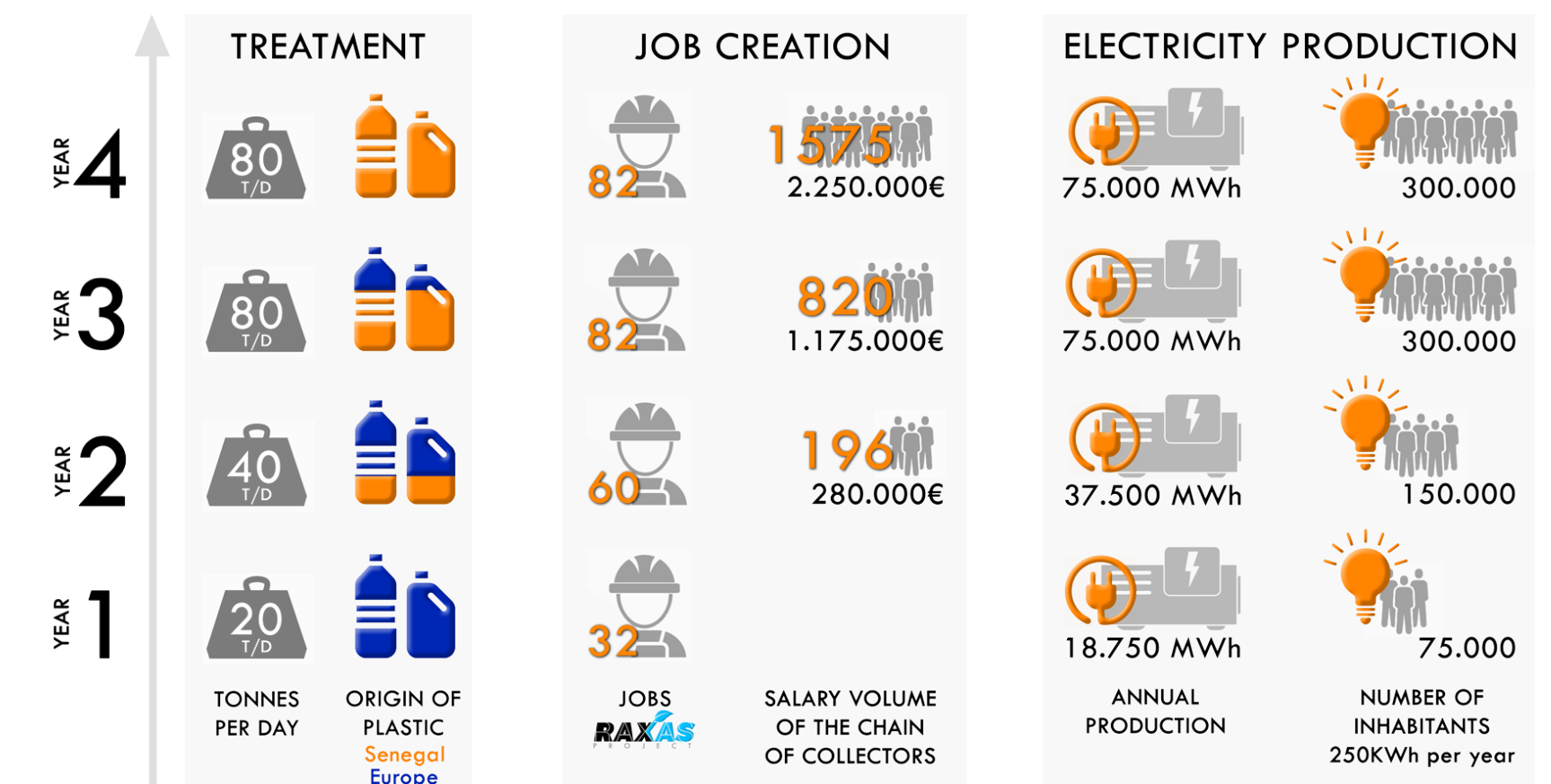
Thus, with a salary volume in year 3 of 1.175.000€, Raxas pays the equivalent of 820 full-time staff.

Energy production:

The energy that Raxas will produce thanks to its technology for transforming plastic waste into electrical energy will considerably remedy the country's energy deficit.

In Senegal, the average annual electricity consumption per capita is 250 KWh.

Thus, the forecast for year 3 shows an electricity production satisfying 300.000 inhabitants.



EQUIPE RAXAS



VINCENT HAVAUX

Founder of RAXAS project

Environmental pollution by plastic in Senegal prompted Vincent to find a promising solution. He brought together enthusiastic and professional partners to take up this challenge, while contributing to an emerging circular economy in Senegal.

His strong points:

- *A good knowledge of Senegal.*
- *Experience in import/export to Senegal for many years*
- *Entrepreneur in the construction sector.*
- *Technician in industrial mechanics (experience in the field of rotary presses and industrial mechanics in the pharmaceutical industry).*



ANTHONY HUERTA

Co-Founder of RAXAS project

Animator, set designer and one of the pioneers of CGI in Belgium.

Founder of nWave Digital with whom Anthony produces about thirty films for amusement parks with dynamic seats, about ten films for Imax theatres and several feature-length 3D-relief animation films.

Since 2015, he manages the Galerie Horta, a multi-cultural space in the centre of Brussels.

His main mission for Raxas Project is marketing and communication with major accounts and market players.



66%
of placentas
show presence
of microplastics

source : [click on image](#)

EQUIPE RAXAS



KEVIN HUERTA

Financial advisor on RAXAS project

After studying commercial and financial engineering in Brussels, Kevin coordinated the project to redevelop the Horta shopping mall in the centre of Brussels, where 5,722.91 m² of commercial space was turned into a cultural and tourist centre, including a museum, an exhibition hall and an event space that will welcome more than 300,000 visitors and over 100 events in 2022.

He coordinates the financing and operational management of the projects.

Kevin will use his organisational skills and financial advice to help the Raxas project.



FANNY

Strategic advisor on RAXAS project

After her training in Comparative Ethnology and Sociology, and her training in Political Science, Fanny first worked as a field manager and trainer for rural agricultural cooperatives.

She travelled around Northern Ghana and Southern Burkina Faso for almost two years.

Back in Europe, she joined various European Union programmes, with COLEACP and the ACP secretariat in Brussels as an expert in training and logistics organisation. For 7 years she worked with no less than 15 countries in the African, Caribbean and Pacific zone, Senegal being one of the leading countries. She also worked on land law projects in Guinea Conakry, supervised by a local consultancy firm, as well as with consultancy firms based in Europe and working in Africa, notably in Cameroon.

Finally, she also joined a consortium of experts as Assistant Project Manager at the Association des Pays et Territoires d'Outre-mer where she was in charge of Public Relations and Communication, mainly with the European Parliament.

Fanny joins the Raxas Project as an external observer, providing methodological advice and relational support.



5gr

ingested
per person
per week
= 1 creditcard !

[source : click on image](#)

EQUIPE RAXAS



ERIC MARTINEZ

Collaborator on RAXAS project

After a PhD in analytical chemistry with two publications in the journal Inorganic Chemistry Review, Eric became involved in the management of innovative companies, such as Chorten, Soulcam, Airgrip and Dynaflow. With more than 20 years of activity in the R&D department, his vast experience in the development of demanding projects such as "Monumenta" in which cultural data from world heritage sites will be implemented via digital photogrammetry in a real-time engine, "Vertigo", which presents an innovative technology in terms of live image capture, "Sira" with its ambitious goal to develop an aerostat that offers a fixed high point to transport and stabilise any type of instrument, the development of a precise 7th axis motion simulator for Dynaflow, makes Eric the ideal partner to bring his knowledge to Raxas for the development of the pilot project in Senegal.



PATRICK VAN HAITEM

Collaborator on RAXAS project

Patrick has been involved in more than a thousand audiovisual productions, leading high profile teams. He has literally shot all over the world and probably travels more than he should. His film production network "MiW * Made in World" has offices in Brussels, Lisbon, Los Angeles, Sofia, Shanghai and Taipei. In 2010, he joined Soulcam, where he continues to take on new challenges, one of which led to the creation of Dynaflow, a company specialising in Dynamic Virtual Reality. A multilingual globetrotter with over 30 years of marketing experience, Patrick will be the global ambassador for Raxas.



53kg

of plastic waste
per person/year

[source : click on image](#)

PARTENAIRES



[TRP](#) is one of the European leaders in plastic thermolysis technology. TPR is an active participant in the TRESORE2 - Technology for RESource Recovery project, which receives financial support from the European Union and Wallonia and aims to recycle and recover end-of-life plastic waste by thermolysis. TPR has invested in thermolysis equipment from the Huayin Group (China) to carry out tests and improve the technique in terms of safety and CE standards.



[Renewi plc](#) is a leading European company specialising in the collection, sorting and recovery of waste, including plastics, operating mainly in the Benelux region. RENEWI operates a number of sorting centres in just over 200 locations in nine countries.



[MPF Europe](#) is a company specialising in the design, manufacture, installation and maintenance of industrial equipment and customised solutions. With its mini-company structure, MPF Europe employs an average of 65 people and is dynamic and responsive in all situations. Safety, health and the environment are also central to MPF Europe's concerns.



5000

TONS PER DAY

of plastic waste
that Europe
exports to
third countries

(Asia, Middle-East, Africa)

[source : click on image](#)

PARTENAIRES



Recuplast

Created on the initiative of the company Proplast Industrie, the No. 1 plastic recycling company in Senegal, Recuplast aims to be a collection network and point of sale to buy plastic materials and sell products made from them.

Recuplast thus creates a circular economy around plastics.

The overall objective of the project is to preserve the environment by eliminating the proliferation of plastics in the streets and public places of cities and countryside.



SUPPORT RAXAS

Until now, the West has "processed" its plastics mainly by exporting them to emerging countries.

This policy displaces the environmental problem they pose, as pollution knows no borders. We are therefore just as concerned by their fate as if they had stayed in the country of origin.

Raxas is a response that has the merit, in addition to its primary mission of processing plastics, of building an economy of the future in countries that would not have the means to do so on their own.

A transformation of the local economy from a linear model to a circular model, valuing pollutants and creating sustainable jobs.

Support Raxas!

Peace





THANK YOU FOR YOUR ATTENTION

contact

Vincent Havaux
vincent@raxas.net
+32 474 73 72 71

Anthony Huerta
anthony@raxas.net
+32 475 79 08 48