

ZERO PELLET

THE BRAZILIAN EXPERIENCE



Miguel Bahiense Neto
President of Plastivida

Zero Pellet – OCS[®] in Brasil



What is it?

Global in scope, the Zero Pellet program supports industries / companies in the plastics production chain to implement in their operations good practices for the maintenance and containment of pellets, flakes and powdered resin, in order to achieve zero loss of these products to the environment. It has consolidated itself as one of the main environmental protection actions in the sector

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What is it?

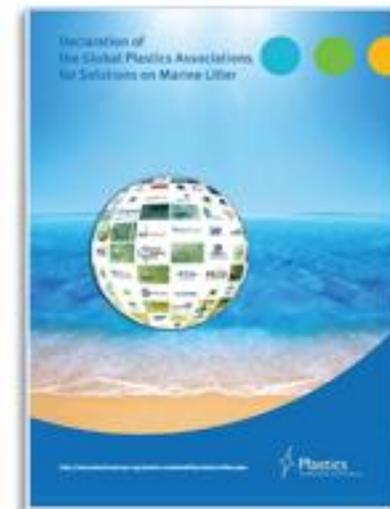
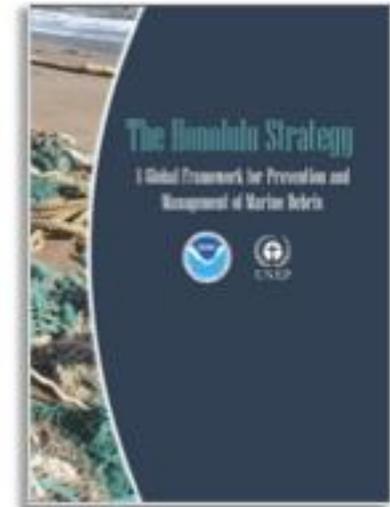
Plastic resin in granules are small raw material spheres used for the production of plastic artifacts

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History

- ✓ 5th *International Marine Debris Conference* ”: Held in Hawaii, the **Honolulu Strategy** was launched, which sets out commitments for the global effort to reduce the impacts of marine litter
- ✓ As a result of this Strategy and at the invitation of *Plastics Europe* and *American Chemistry Council (ACC)*, Plastivida became a signatory to the *Declaration of the Global Plastics Associations for Solutions on Marine Litter* *
- ✓ There are currently more than 150 initiatives by the Global Plastics Industry, including in Brazil, to implement solutions to the problem



Plastivida Agreement – IO/USP

As a signatory of the Global Declaration, in 2012 Plastivida signed a Technical Cooperation Agreement with USP's Oceanographic Institute (IO), the biggest reference on the topic in Brazil, which was renewed in 2017 for another 5 years. It has the following objectives to keep in mind the commitments assumed:



Know and evaluate the characteristics of marine pollution in Brazil



Scale the relevance of Brazil to the Global scenario



Identify and quantify the origin of waste in the seas and beaches of Brazil



Establish time series of data on marine litter



Develop Environmental Education actions for society

Domesticating the theme in Brazil

Time Line

FÓRUM SETORIAL DOS PLÁSTICOS - POR UM MAR LIMPO

Atuação da Indústria Brasileira dos Plásticos



www.porummarlimpo.org.br
pelletzero.porummarlimpo.org.br

- ✓ Assinatura do "Compromisso de Honolulu".
- ✓ Elaboração e assinatura da "Declaração Global Conjunta da Indústria dos Plásticos", da qual a Plastivida é uma das 54 entidades signatárias.

- ✓ Assinatura do convênio Plastivida-IO/USP para implantação e implementação no Brasil dos compromissos assumidos na Declaração Global.
- ✓ Diagnóstico e monitoramento de resíduos em 13 praias no litoral do estado de São Paulo.
- ✓ Levantamento de bibliografia e de pesquisadores relacionados ao tema no Brasil e no mundo.

- ✓ Diagnóstico e monitoramento de resíduos em 3 praias no litoral do estado da Bahia.
- ✓ Diagnóstico e monitoramento de resíduos em 3 praias no litoral do estado de Alagoas.
- ✓ Continuidade do diagnóstico e monitoramento de resíduos em 6 praias no litoral do estado de São Paulo.

- ✓ Diagnóstico da perda de *pellets* na cadeia produtiva dos plásticos no Brasil, bem como em terminais portuários do país.
- ✓ Adaptação à realidade brasileira do Manual de Orientações "Pellet Zero - OCS". O Programa "Pellet Zero - OCS" é uma das ações mundiais do setor.
- ✓ Continuidade do monitoramento de resíduos no litoral dos estados de São Paulo, Bahia e Alagoas.

- ✓ Realização de ações de educação ambiental nos municípios onde foram feitos os diagnósticos e monitoramentos de resíduos no estado de São Paulo.
- ✓ Diagnóstico da poluição da Baía de Guanabara, no estado do Rio de Janeiro.
- ✓ Criação do "Comitê Lixo nos Mares" pela Plastivida em conjunto com o IO/USP.

2011

2012

2013

2014

2015



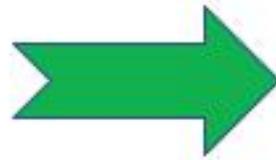
Plastics Sector Forum: For a Clean Sea

Actions carried out in 2016:

- ✓ The Plastivida Committee became the Plastics Sectorial Forum: For a Clean Sea
- ✓ It currently has 18 signatories, including trade associations, unions and industries, who have signed the Declaration of Intent *, based on the Declaration of the Global Plastics Associations
- ✓ Creation of the “EnTenda o Lixo” (“*UnderStand Trash*”) Project, carried out for the first time during the Olympic and Paralympic Games in Rio de Janeiro



Launch of a new visual identity:



Plastics Sector Forum: For a Clean Sea

Signatories:



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Why apply in Brazil?

- ✓ Types of plastics in the seas: Macro plastics (above 2.5 cm), Meso Plastic (intermediate, sub-sampled) and Micro plastics (below 0.5 cm)
- ✓ Most suitable measurement methodologies:
 - ✓ Macro plastics: fit to the measure by “mass”
 - ✓ Micro plastics: fit to the measure by “number of items”
- ✓ Around 90% of the mass of plastics found in the seas are Macro plastics:
 - ✓ 80% originates on the continent, by poor management of urban solid waste and tourist activities on beaches
 - ✓ 20% comes from activities carried out at sea, such as fishing and transportation (tourist or merchant)

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Why apply in Brazil?

- ✓ Around 10% of the mass of plastics found in the seas are Microplastics
- ✓ The rates of 90% X 10% vary according to:
 - ✓ Location (port areas, islands, places with or without basic sanitation)
 - ✓ Periods (eg parties on beaches like New Year's Eve)
 - ✓ Ocean currents
- ✓ Pellets make up the universe of Microplastics and it makes no sense to evaluate their presence by "mass", but by "quantity of items"
- ✓ Studies show the presence of pellets in different locations, ranging from negligible quantities of items to 16% of collected microplastics

Pellet Zero – OCS[®] no Brasil

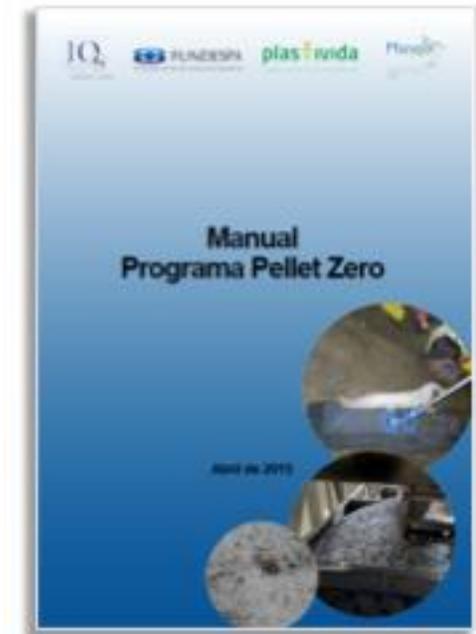
Why apply in Brazil?

- ✓ Its presence is associated with port areas, mainly due to industrial distribution systems, but there are pellets that reach the seas from the continent through rivers, from factories, warehouses and land transport
- ✓ Thus, the industry has an important role in the marine litter context since pellets are, in fact, found in the seas, although in comparatively small quantities and pellet management depends solely on the governance of the sector.

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Actions carried out in 2014:

- ✓ **Diagnosis of pellet losses in the Brazilian plastics production chain**
- ✓ **Diagnosis of the pellet losses at the Santos port terminal**
- ✓ **Adaptation of the Zero Pellet Guidance Manual, which was one of the plastic sector global actions and completed in 2015**
- ✓ **Continuation of waste monitoring on Brazilian beaches**



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Innovative model :

- ✓ Construction process with the sector and, therefore, innovative
- ✓ Importance of the Program and the adhesion of companies to the process
- ✓ Avoid accidents and reduce losses
- ✓ Process of continuous improvement, solid, systematized; staggered, fully documented; 100% transparent, with credibility / reliability, complies with compliance policies
- ✓ Possibility of support, monitoring, validation of each step of the process
- ✓ Strengthening the role of company employees as protagonists

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Implementation process :

- ✓ By company / unit
- ✓ General focal point / unit
- ✓ Term of adhesion per unit / company
- ✓ Confidentiality
- ✓ Monitoring / Renewal
- ✓ Up to two years to obtain the 5 stars and start the monitoring cycle

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Brazilian Licensors :

- ✓ The application model in Brazil is unique, and follows the premises established jointly within the scope of the Sectorial Forum on Plastics
- ✓ Approved by OCS[®] - PIA (*Plastic Industry Association*) and ACC (*American Chemistry Council*) brand holders



abiplast

Associação Brasileira da Indústria do Plástico

plastivida

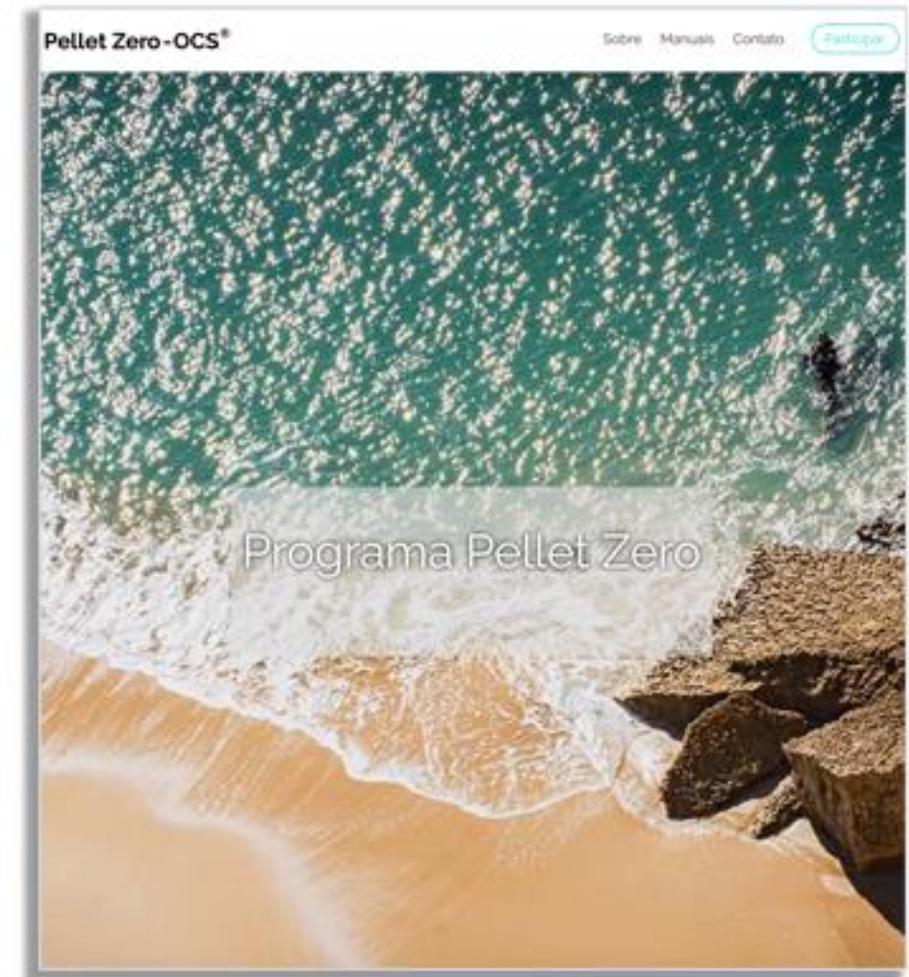
Juntos somos mais sustentáveis.

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Zero Pellet Program Platform-OCS[®]:

- ✓ Sharing good practices
- ✓ Program Data
- ✓ Dissemination of PPZ-OCS[®]

<http://pelletzero.porummarlimpo.org.br/>



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Implementation process :

- ✓ Access to the PPZ-OCS[®] platform
- ✓ Download Program Manuals and implementation
- ✓ Filling out the form Diagnostic Checklist
- ✓ Planning start (Work Plan) for action

Participar

Caso sua empresa tenha interesse em assinar o Compromisso PPZ-OCS[®], por favor, preencha o cadastro para receber maiores informações. O preenchimento desse formulário não implica em assumir o compromisso.

Segmento

Petroquímica Transformador Reciclador Armazém Terminal portuário

Distribuidor Transportador Outro (Especifique)

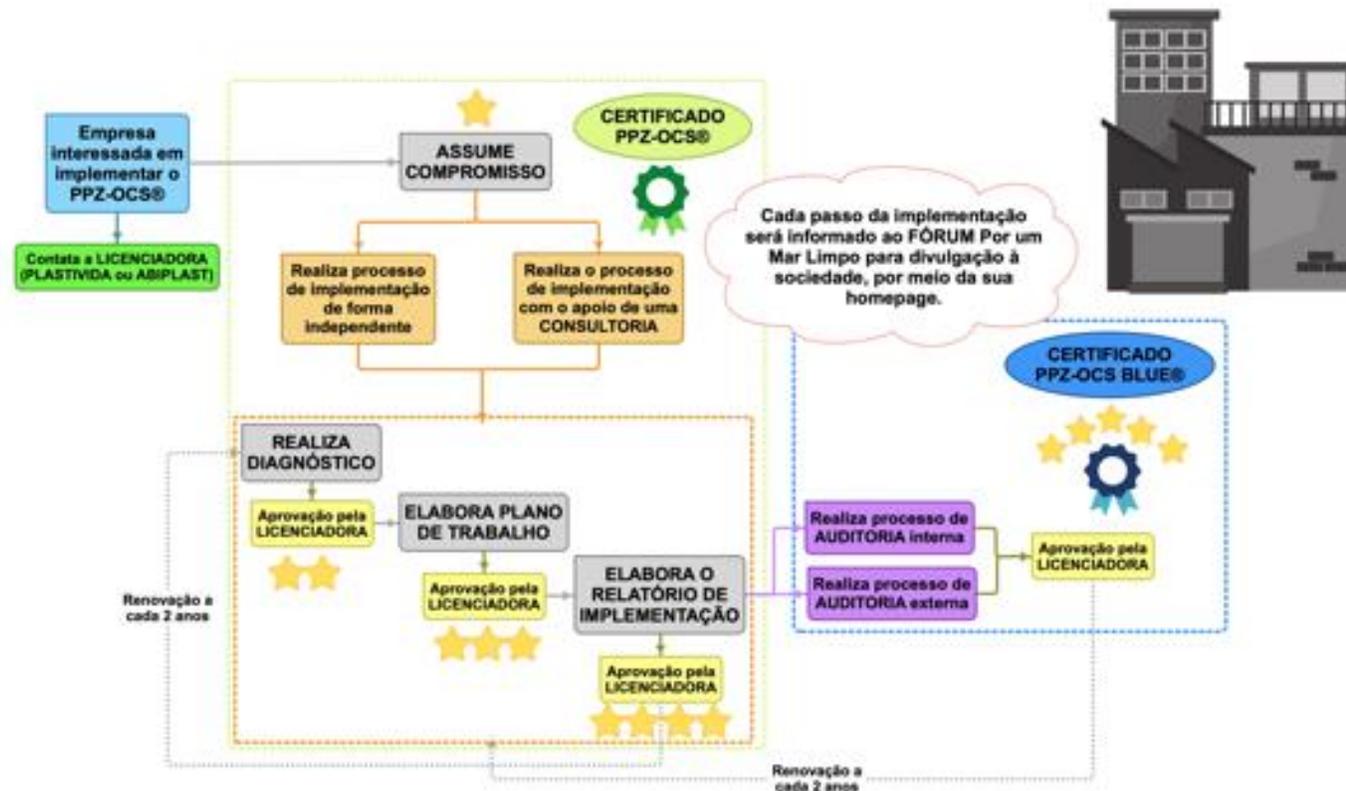
Certificadora Plastivida Abiplast

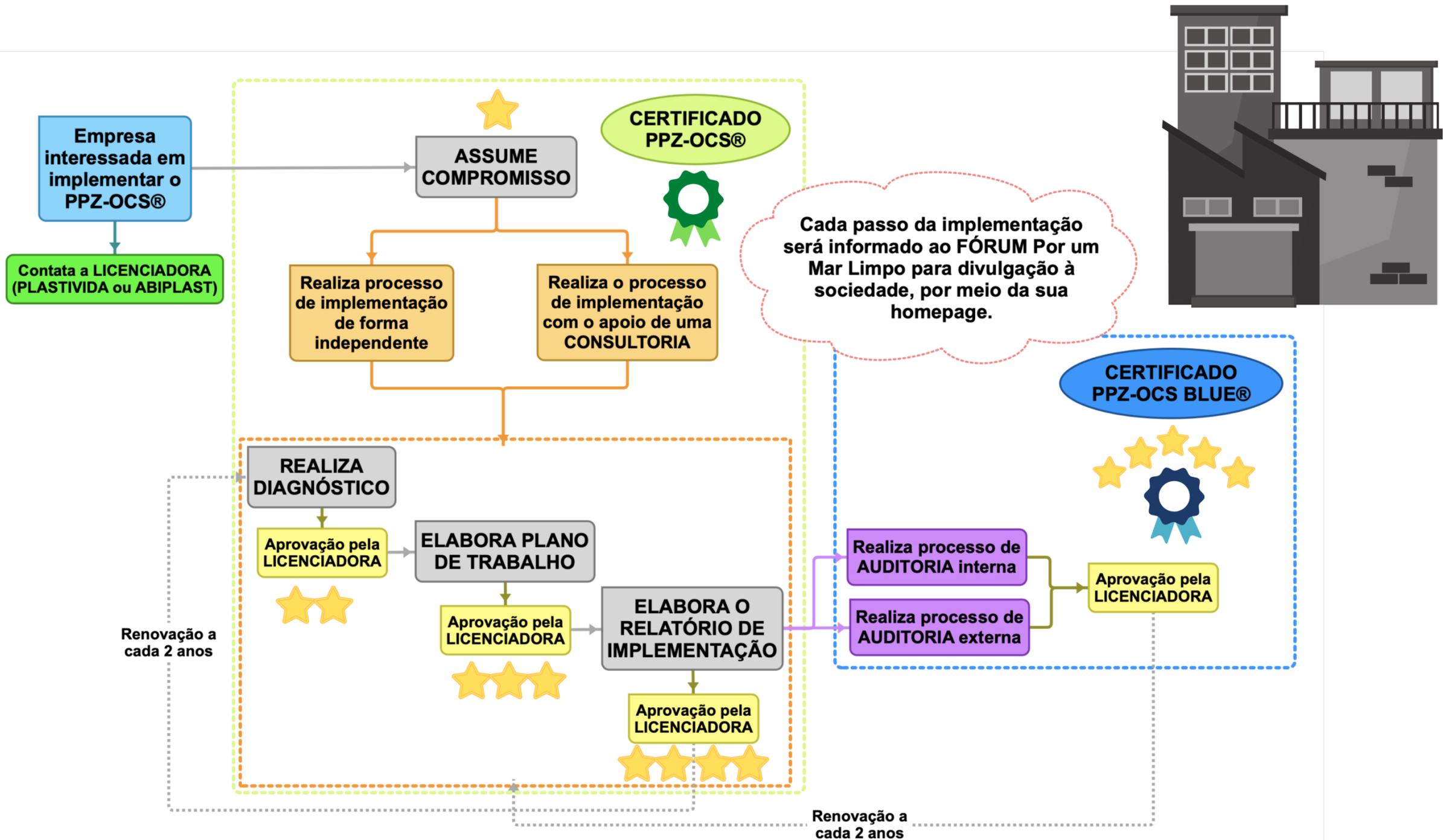
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How to implement :





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Process Start:

- ✓ "Voluntary commitment to promote and expand the reach of the Circular Economy in plastic packaging"
- ✓ Launched by ABIQUIM - Brazilian Chemical Industry Association, the Commitment defines that, voluntarily, the signatory companies must implement the Zero Pellet and its operations



7 de dezembro de 2018

**ABIQUIM LAUNCHES VOLUNTARY COMMITMENT IN FAVOR OF
CIRCULAR ECONOMY¹ IN PLASTIC RESIN SECTOR**

Plastic resins manufacturers - members of the Brazilian Chemical Industry Association (Abiquim) - launch their voluntary commitment in order to promote and enhance the outreach of Circular Economy in plastic packaging.

The management of solid waste represents a global challenge, and there is an increasing concern about plastic wastes. In this context, the manufacturers of plastic resins, members of the Brazilian Chemical Industry Association, show their commitment to the existing challenges and adopt the following aspirational goal:

- By 2040, 100% of the plastic packaging will be reused, recycled or recovered

From now on, such companies will elaborate a multi-annual plan aiming at achieving this goal. They set an ambitious and intermediate goal:

- By 2030, 50% of plastic packaging will be reused, recycled or recovered.

Additionally, in order to highlight their commitment to directly contribute to the marine litter issue, as well as to the Responsible Care Program @the companies also establish that:

- By 2020, 100% of manufacturers of plastic resins, members of Abiquim, should adopt the best practices of “Zero Pellets² Loss Manual” of Plastic Sector Forum – For Cleaner Oceans.

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Expanding the scope of PPZ-OCS[®] :

- ✓ Petrochemical
- ✓ Transformation
- ✓ Need to involve service providers:
 - carriers
 - distributors



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Implementation Program Status: Total GG companies

Total companies: 25

- ✓ 13 companies have already received a star: **SIGNATURE OF THE COMMITMENT**
- ✓ 8 companies have already received two stars: **DIAGNOSIS**
- ✓ 1 companies have already received three stars: **WORK PLAN**
- ✓ 2 company has already received four stars: **IMPLEMENTATION REPORT**
- ✓ 1 Company received five stars: **OCS® BLUE CERTIFICATION**

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TDI



JALOTO
TRANSPORTES



BOMIX

TRANSJOI
Operações de Transporte

GRUPO **TONIATO**



Ebamag
Soluções Logísticas

PRIMELOG
LOGÍSTICA INTEGRADA

TRANSPORTES
BENDINI
LOGÍSTICA



GRANELEIRO
Transportes Rodoviários Ltda.

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Zero Pellet – OCS®



Operation Clean Sweep®

A Plastivida, como licenciadora do Programa Internacional OPERATION CLEAN SWEEP (OCS®) e seguindo os princípios do FÓRUM SETORIAL DOS PLÁSTICOS – POR UM MAR LIMPO, certifica

como empresa comprometida na implementação do Programa Pellet Zero - OCS®, para a mitigação de perda de pellets, flakes e pó para o ambiente.



São Paulo, 25 de agosto de 2020.

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Miguel Bahiense
Presidente da Plastivida



Operation Clean Sweep® Blue

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como empresa comprometida na implementação do Programa Pellet Zero - OCS® Blue, para a mitigação de perda de pellets, flakes e pó para o ambiente.



São Paulo, 25 de agosto de 2020.

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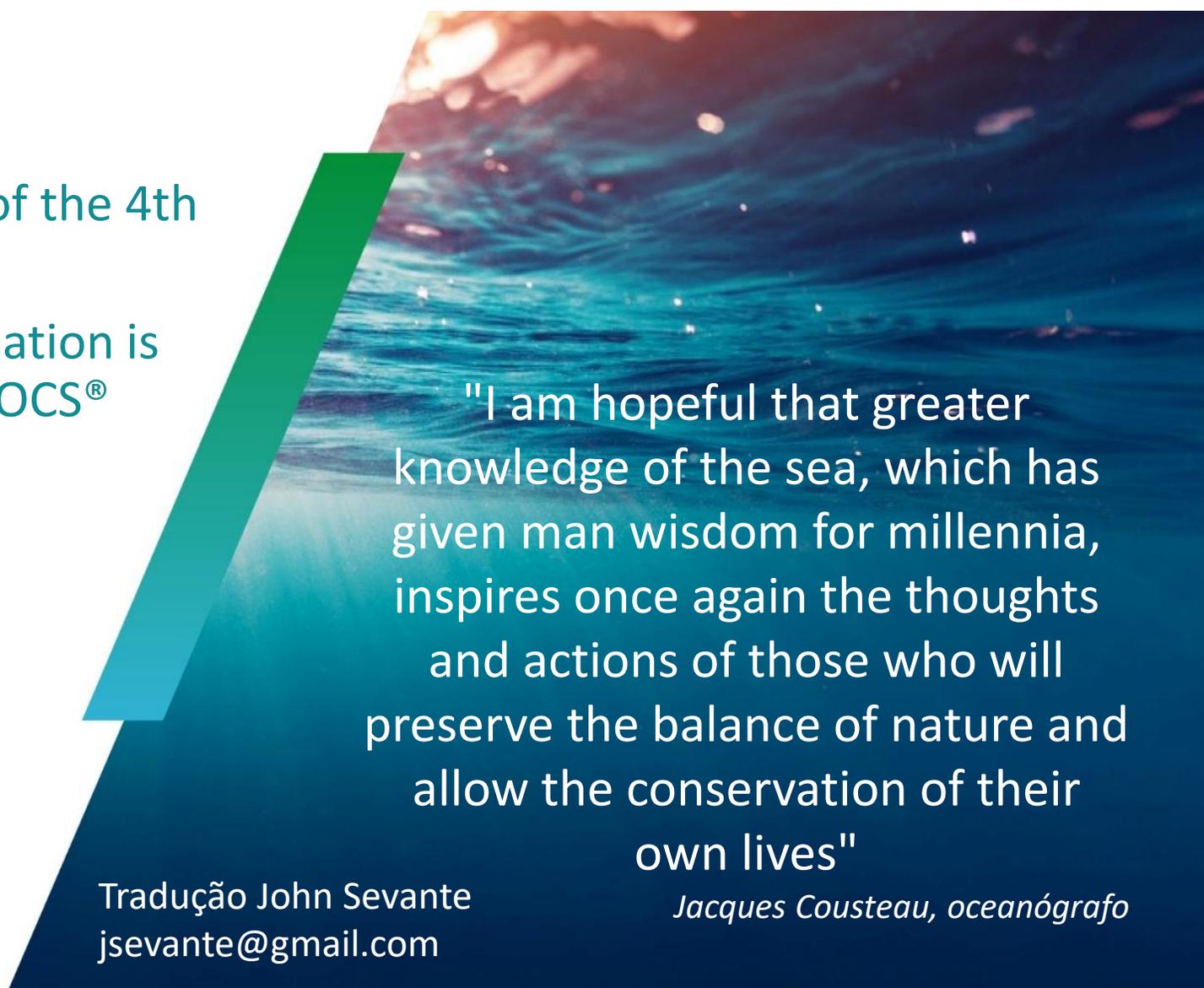
- ✓ We want to thank the organization of the 4th Brazilian PLASTIC Congress
- ✓ Message to the sector: your participation is essential for the success of the PPZ-OCS® Program



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Chair on Ocean Sustainability
University of São Paulo
Established in 2018



"I am hopeful that greater knowledge of the sea, which has given man wisdom for millennia, inspires once again the thoughts and actions of those who will preserve the balance of nature and allow the conservation of their own lives"

Tradução John Sevante
jsevante@gmail.com

Jacques Cousteau, oceanógrafo